

Fig. 1

ACCATGTAGCGGCCCTGCGCGCTCGCTCGCTCACTGAGGCCGCCCGGGCAAAGCCGGGCGTCGGGCGACCTTTGGT
 CGCCCGGCTCAGTGAGCGAGCGAGCGCGCAGAGAGGGAGTGGCCAACTCCATCACTAGGGGTTCTTGTAGTTAAT
 GATTAACCCGCCATGCTACTTATCTACGTAGCCATGCTCTAGGGAATTGGCCGCGGAATTCGACTCTAGGCCATTG
 CATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGACATTGATT
 ATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGGTTACATAAC
 TTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGACGTATGTTCCCAT
 GTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTACGGTAACTGCCACTTGGCAGTACATCA
 AGTGTATCATATGCCAAGTCCGCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCAGTACA
 TGACCTTACGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTGG
 CAGTACACCAATGGGCGTGATAGCGGTTTGACTCAGGGGATTTCCAAGTCTCCACCCCATGACGTCAATGGGAG
 TTTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTGTAATAACCCCGCCCGTTGACGCAATGGGCGGTA
 GCGGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCTGGAGACGCCATCCACGC
 TGTTTTGACCTCCATAGAAGACACCGGACCGATCCAGCCTCCGCGCGCGGAACGGTGCATTGGAACGCGGATTCC
 CCGTGCCAAGAGTGACGTAAGTACCGCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACTGT
 TTTTGGCTTGGGCGCTATACACCCCGCTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGTTAT
 TGACCATTATTGACCACTCCCTATTGGTGACGATACTTCCATTACTAATCCATAACATGGCTCTTTGCCACAAC
 ATCTCTATTGGCTATATGCCAATACTCTGTCTTCCAGAGACTGACACGGACTCTGTATTTTACAGGATGGGGTCCA
 TTTATTATTTACAAATTCACATATAACAACGCGCTCCCGTGCCCGCAGTTTTTATTAACATAGCGTGGGATC
 TCCGACATCTCGGTACGTGTTCCGGACATGGGCTCTTCTCCGTAGCGGCGGAGCTTCCACATCCGAGCCCTGGTC
 CCATCCGTCCAGCGGCTCATGGTCTCGTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGACAA
 TGCCACCACCACAGTGTGCGGCACAAGGCGGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGT
 CGCACCTGGACGCAGATGGAAGACTTAAGGCAGCGGCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAA
 GAGTCAGAGGTAACCTCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCTGAGCAGTACTCGTTGCTGCCGC
 GCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCTTTCCATGGGTCTTTCTGCACTACCGTCTGTC
 GACCTAAGAATTCAGGCCTAAGCTTCTAGGTATCGATCTCGAGCAAGTCTAGAGGGAGACCACAACGGTTTCCCTC
 TAGCGGGATCAATTCGCGCCCCCCCCCTAACGTTACTGGCCGAAGCGCTTGAATAAGGCCGGTGTGCGTTTGTCT
 ATATGTTATTTCCACCATATTGCCGTCTTTTGGCAATGTGAGGGCCGGAAACCTGGCCCTGTCTTCTTGACGAGC
 ATTCCTAGGGGTCTTTCCCTCTCGCCAAAGGAATGCAAGGTCTGTTGAATGTCGTGAAGGAAGCAGTTCTCTGGA
 AGCTTCTTGAGACAAAACAGTCTGTAGCGACCTTTGCAGGCAGCGGAACCCCCACCTGGCGACAGGTGCTCT
 GCGGCCAAAAGCCAGTGTATAAGATACACCTGCAAAGCGGCACAACCCAGTGCCACGTTGTGAGTTGGATAGTT
 GTGGAAGAGTCAAATGGCTCTCTCAAGCGTATTCAACAAGGGGCTGAAGGATGCCAGAAGGTACCCATTGTAT
 GGGATCTGATCTGGGGCTCGGTGCACATGCTTTACATGTGTTAGTCGAGGTTAAAAAACGTCTAGGCCCCCGA
 ACCACGGGGACGTGGTTTTCTTTGAAAAACAGATAATACCATGGCCGCGGGAGCATACCACGCTGCCAGCCCT
 GCGGAGGACGGCGGCGCGGCTTTCCCGCGGGCCACTTCAAGGACCCCAAGCGCTGTACTGCAAGAACGGGG
 GCTTCTTCTGCGCATCCACCCGACGGCGAGTGGACGGGTCCGCGAGAAGAGCGACCCACACATCAAATAACAA
 CTTCAGCAGAAGAGAGAGGGGTGTGTCTATCAAAGGAGTGTGTGCAAACCGTTACCTTGCTATGAAAGAAGATGG
 AAGATTACTAGCTTCTAAATGTGTTACAGAGAGTGTGTTCTTTTGAACGATTGGAGTCTAATAACTACAATACTT
 ACCGGTCAAGGAAATACACCAGTTGGTATGTGGCACTGAAACGAAGTGGGCAGTATAAATTTGGATCCAAAACAGGA
 CCTGGGCAGAAAGCTATACTTTTCTTCCAATGTCTGCTAAGAGCTGATCTTAATGGCAGCATCTGATCTCATTTTA
 CATGAAGCTGGTGGCATCCCTGTGACCCCTCCCAAGTGCCCTCTCTGGCCCTGGAAGTTGCCACTCCAGTGCCACC
 AGCCTTGCTCTAATAAAATTAAGTTGCATCTTTTGTCTGACTAGGTGCTTCTATAATATTATGGGGTGGAGGGG
 GGTGGTATGGAGCAAGGGCAAGTTGGGAAGACAACCTGTAGGGCTGCGGGGTCTATTGGGAACCAAGCTGGAGTG
 CAGTGGCACAATCTGGCTCACTGCAATCTCCGCTCCTGGGTTCAAGCGATTCTCTGCTCAGCCTCCGAGTTG

Fig. 2A

TTGGGATTCCAGGCATGCATGACCAGGCTCAGCTAATTTTGTGTTTTTGGTAGAGACGGGGTTTCACCATATTGGC
CAGGCTGGTCTCCTAATCTCAGGTGATCTACCCACCTTGGCCTCCCAAATTGCTGGGATTACAGGCGTGAA
CCTGCTCCCTTCCCTGTCTTCTGATTTTAAAATACTATACCAGCAGGAGGACGTCAGACACAGCATAGGCTA
CCTGGCCATGCCAACCGGTGGGACATTTGAGTTGCTTGGCTGCTGCTCTCATGCGTTGGGTCCACTCAGTA
GATGCTGTTGAATTATCGGATCCACTACGCGTTAGAGCTCGCTGATCAGCCTCGACTGTGCTTCTAGTTGCCAGC
CATCTGTTGTTTGGCCCTCCCGGTGCCTTCTTGACCTGGAAGGTGCCACTCCACTGTCTTCTCTAATAAAAT
GAGGAAATTCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGTGGGGTGGGCAGGACAGCAAGGGGA
GGATTGGGAAGACAATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCGCGCTGGAGGATCATCCAGCCA
ATTCCTAGAGCATGGCTACGTAGATAAGTAGCATGGCGGTTAATCATTAACTACAAGGAACCCCTAGTGATGGAG
TTGGCCACTCCCTCTCTGCGCGCTCGCTCGCTCACTGAGGCGGGCGACCAAGGTGCGCCGACGCCCGGGCTTTC
CCGGCGGCTCAGTGAGCGAGCGAGCGCGAGGGGTGGGCGAAGAACTCCAGCATGAGATCCCGCGCTGGAGGA
TCATCCAGCGGCGTCCCGAAACGATTCCGAAGCCCAACCTTTCATAGAAGCGGGTGAATCGAAATCTCGT
GATGGCAGGTTGGCGTCTGCTGGTCAATTCGAACCCAGAGTCCCGCTCAGAAGAACTCGTCAAGAAGCGCA
TAGAAGGCGATGCGCTGCGAATCGGGAGCGCGATACCGTAAAGCACGAGGAAGCGGTGAGCCATTGCGCGCAAG
CTCTCAGCAATATCAGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACCCAGCGGCCACAGTCGATGA
ATCCAGAAAAGCGGCCATTTCCACCATGATATTCGGAAGCAGGCATGCCATGGGTACGACGAGATCCTGCGCG
TCGGGCATGCGCGCTTGAGCCTGGCGAACAGTTCGGCTGGCGGAGCCCTGATGCTCTTCGTCAGATCATCCTG
ATCGACAAGACGGCTTCCATCCGAGTACGTGCTCGCTCGATGCGATGTTTCGCTTGGTGGTGAATGGGCAGGTAG
CCGGATCAAGCGTATGAGCGCGCGCATTGCATCAGCCATGATGGATACTTCTCGGCAGGAGCAAGGTGAGATGAC
AGGAGATCCTGCCCCGGCACTTCGCCAATAGCAGCCAGTCCCTTCCCGTTCAAGTACAACGTGAGCACAGCTGC
GCAAGGAACGCCGCTCGTGCCAGCCACGATAGCGCGCTGCCTCGTCTGAGTTCATTAGGGCACCGGACAGGT
CGGTCTTGACAAAAAGAACCGGGCGCCCTGCGCTGACAGCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGT
TGTGCCAGTCATAGCCGAATAGCCTCTCCACCAAGCGGGCGGAGAACCTGGGTGCAATCCATCTTGTCAATCAT
GCGAAACGATCCTCATCTGTCTTTGATCAGATCTTGATCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCA
TCCAGTTTACTTTGAGGGCTTCCCAACCTTACCAGAGGGCGCCCGAGTGGCAATTCGGTTCGCTTGTGTCAT
AAAACCGCCAGTCTAGCTATCGCCATGTAAAGCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGGCTTTCCCT
TGTCAGATAGCCAGTAGCTGACATTCATCCGGGTGAGCACCCTTCTGCGGACTGGCTTTCTACGTGTTCCGCT
TCTTTAGCAGCCCTTGGCCCTGAGTGCTTGGCGAGCGTGAAGCTGTCAATTCGCGTTAAATTTTGTAAATC
AGCTCATTTTTTAACCAATAGGCCGAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCGAGATAGGGTTGAG
TGTGTTCCAGTTTGAACAAGAGTCCACTATTAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATC
AGGGCGATGGCGGATCAGCTTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAAATCCGCATCAGGCGCTC
TTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTGCTTGGCTGCGCGAGCGGTATCAGCTCACTCAAAGGCGG
TAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAGAATCATGTAGCAAAAGGCCAGCAAAAGGCCAGGAAC
CGTAAAAAGGCCGCTTGTGGGCTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAGAAAAATCGACGCTCAAG
TCAGAGGTGGGAAACCCGACAGGACTATAAGATACAGGCGTTCCTTGGAAAGCTCCCTCGTGCCTCTCCTG
TTCCGACCTCGCGTTACCGGATACCTGTCCGCTTTCTCCCTTGGGAAGCGTGGCGCTTCTCATAGCTCACGC
TGTAAGTATCTCAGTTCGGTGTAGGTGTTGCTCCAAGCTGGGCTGTGTGACGAACCCCCGTTACGCCGACCG
CTGCGCTTATCCGTAATATCGTCTTGAAGTCCAACCGGTAAGACAGACTTATCGCCACTGCGAGCAGCCACTG
GTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACCT
AGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGG
CAAAACAACCCAGCTGGTAGCGCGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGA
AGATCCTTTGATCTTTCTTACTGAACGGTATCCCCACCGAATT

Fig. 2B

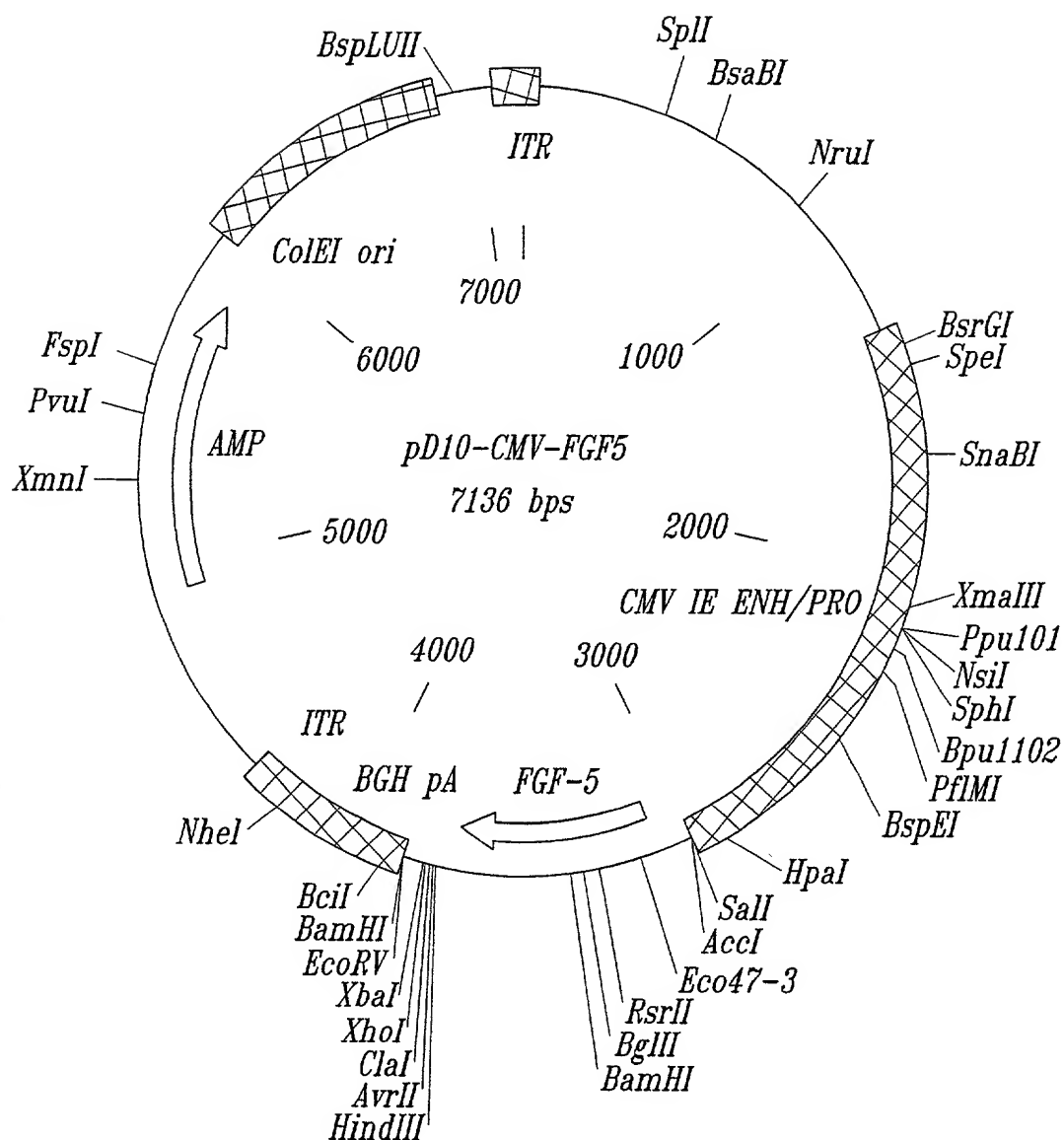


Fig. 3

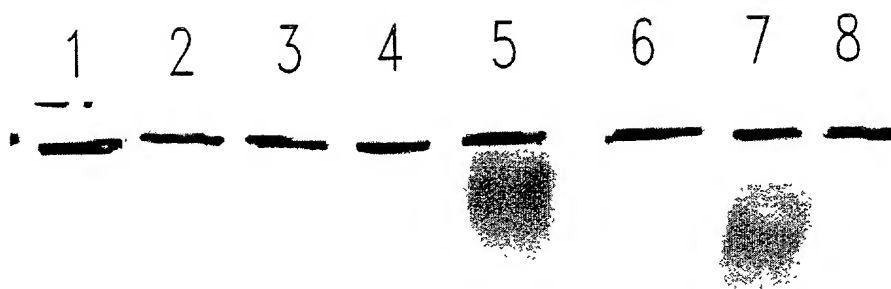


Fig. 4

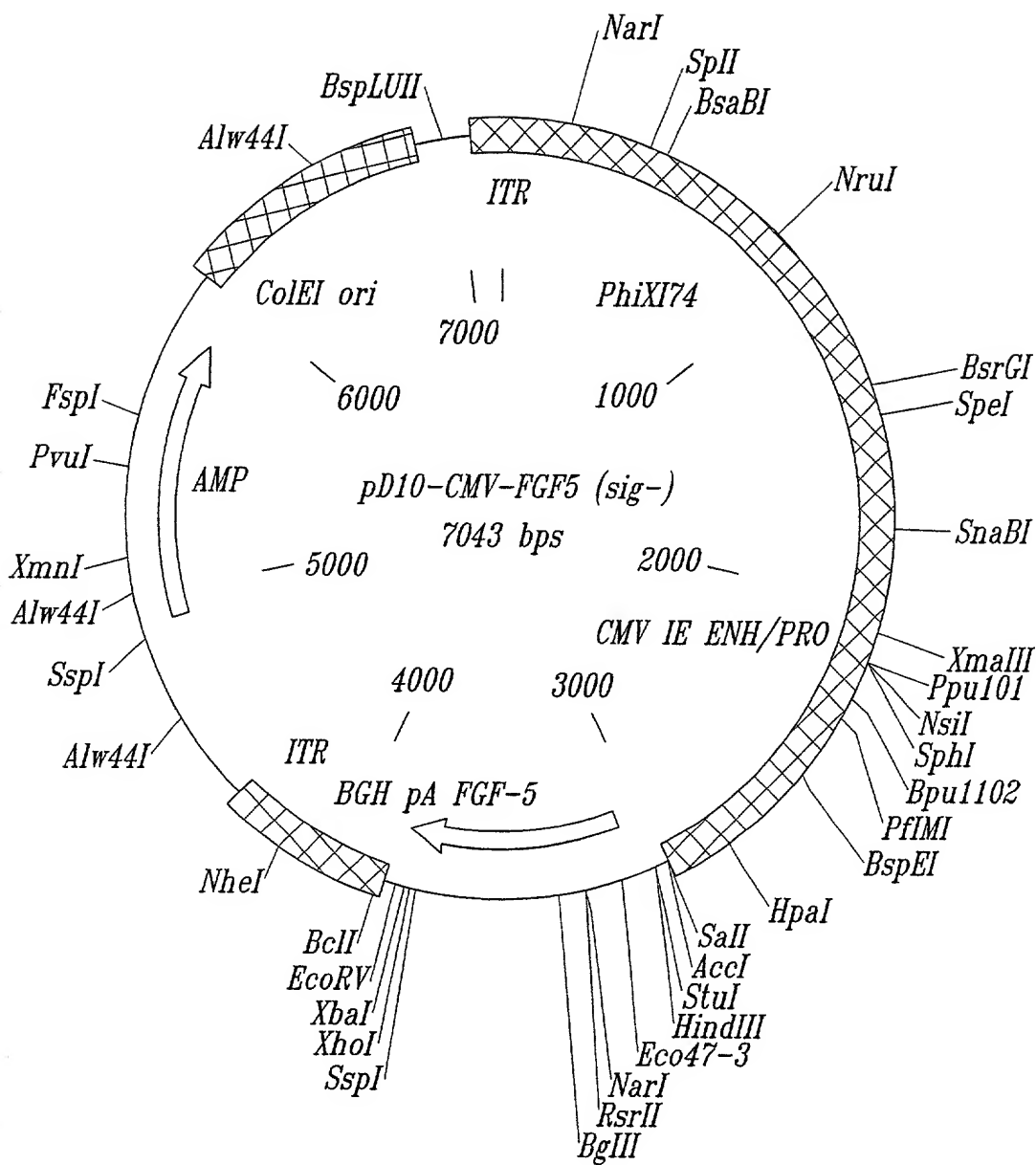


Fig. 5



Fig. 6

1 2 3 4 5 6 7 8 9 10

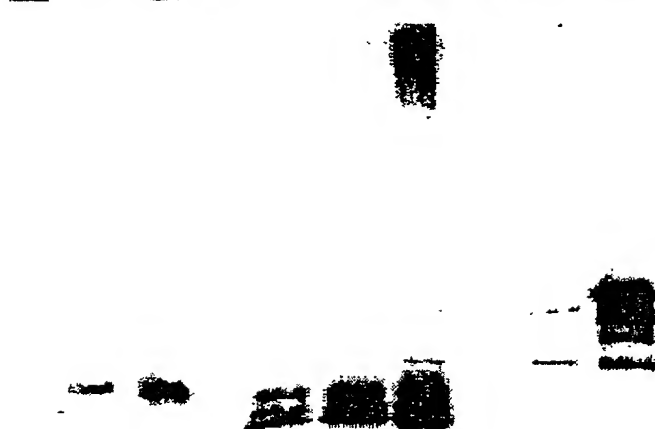
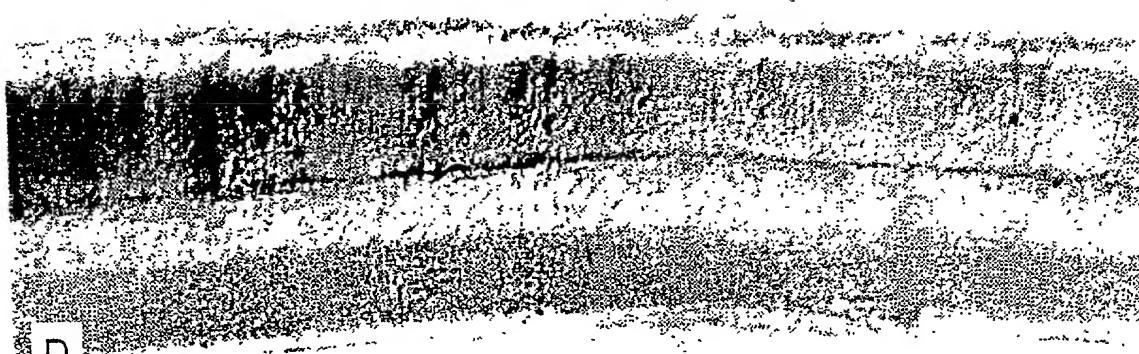


Fig. 8



A



B

Fig. 9

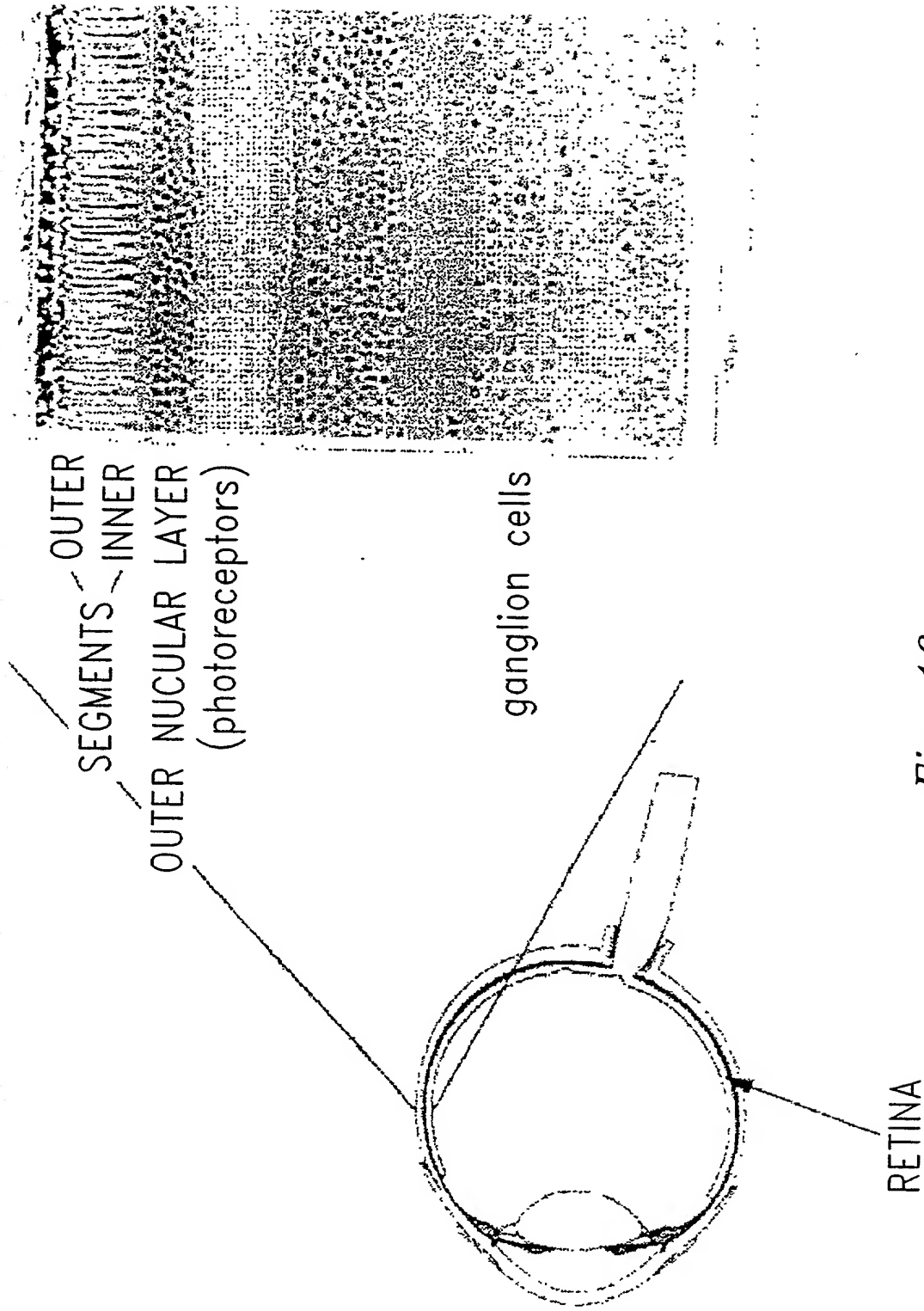
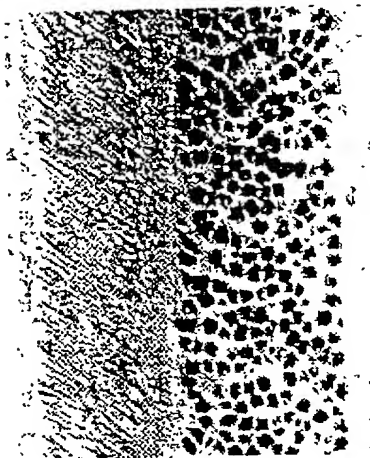


Fig. 10



A

RETINAL PIGMENT EPITHELIUM
OUTER SEGMENTS
INNER SEGMENTS
OUTER NUCULAR LAYER
INNER NUCULAR LAYER



GANGLION CELLS

WILD TYPE

DEGENERATED S334ter



Fig. 11

DEGENERATED S334ter FGF-2 inj S334ter PBS inj S334ter

RPE
OUTER SEGMENTS
INNER SEGMENTS
OUTER NUCLEAR LAYER
(PHOTORECEPTORS)
INNER NUCLEAR LAYER

GANGLION CELL LAYER

A B C

Fig. 12

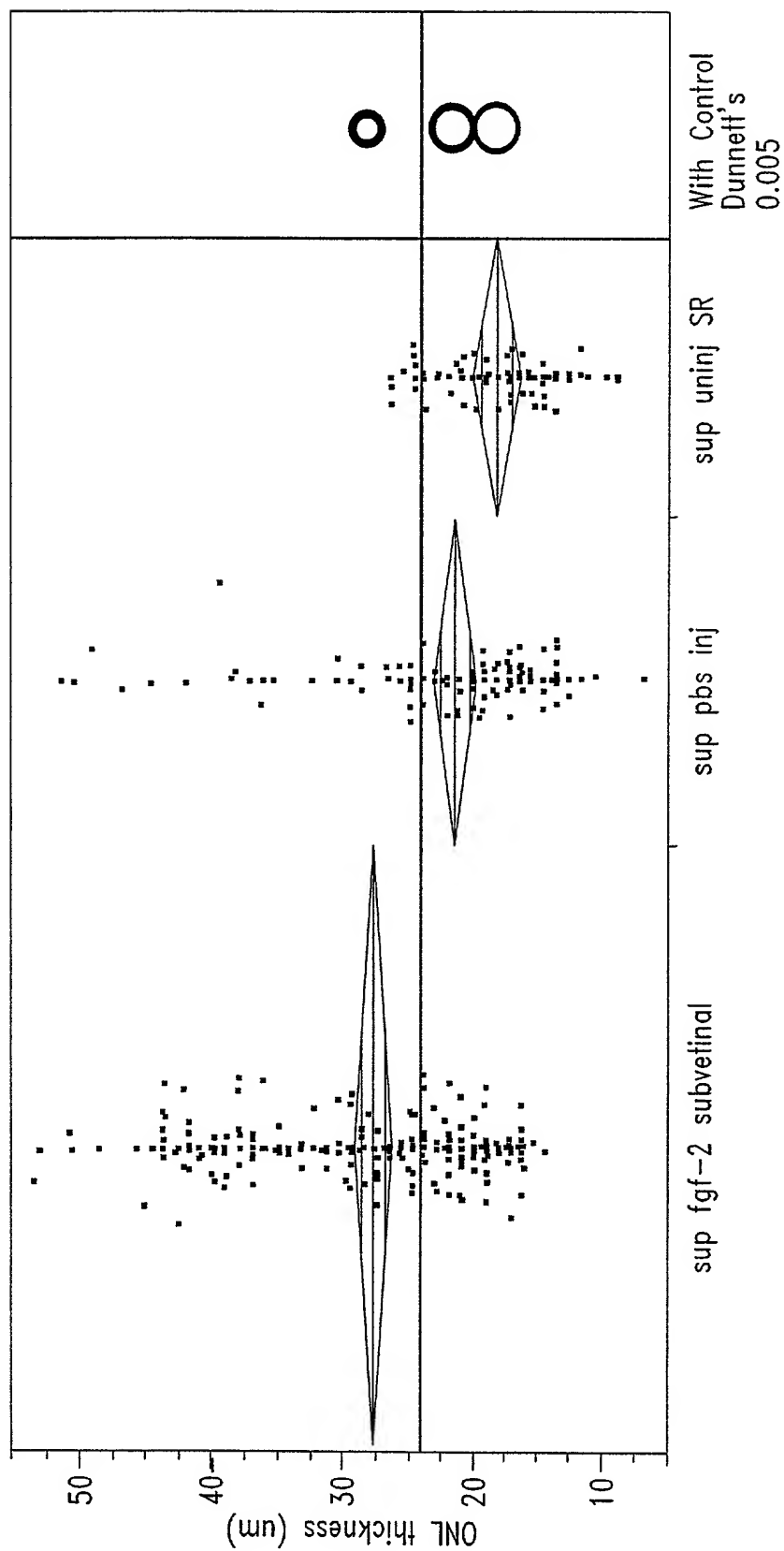


Fig. 13

Downloaded from www.jci.org on 01/11/11

OUTER NUCLEAR LAYER THICKNESS AT p60

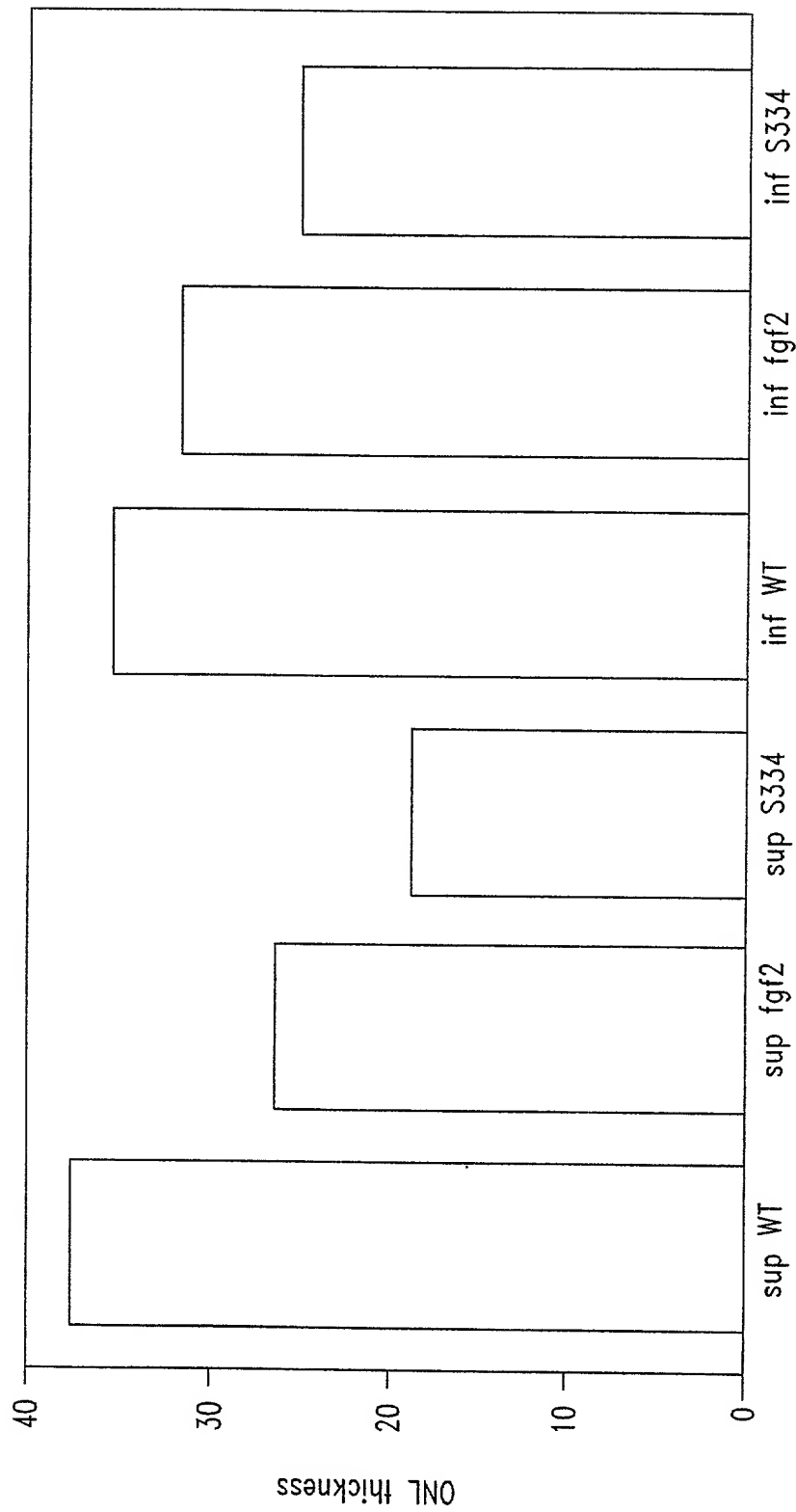
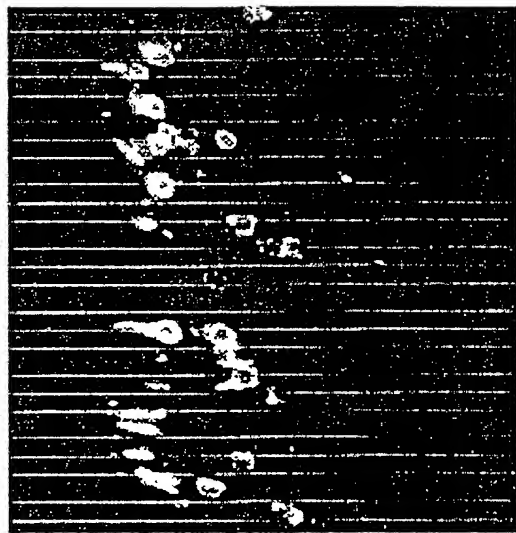
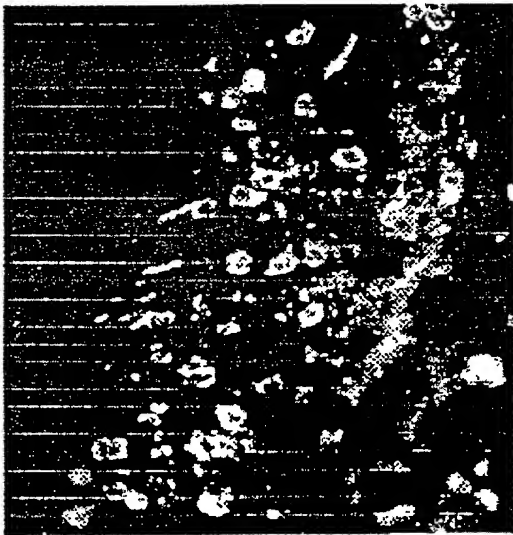


Fig. 14

DATE	DESCRIPTION	AMOUNT	BALANCE
1890	Jan 1		
1891	Jan 1		
1892	Jan 1		
1893	Jan 1		
1894	Jan 1		
1895	Jan 1		
1896	Jan 1		
1897	Jan 1		
1898	Jan 1		
1899	Jan 1		
1900	Jan 1		
1901	Jan 1		
1902	Jan 1		
1903	Jan 1		
1904	Jan 1		
1905	Jan 1		
1906	Jan 1		
1907	Jan 1		
1908	Jan 1		
1909	Jan 1		
1910	Jan 1		
1911	Jan 1		
1912	Jan 1		
1913	Jan 1		
1914	Jan 1		
1915	Jan 1		
1916	Jan 1		
1917	Jan 1		
1918	Jan 1		
1919	Jan 1		
1920	Jan 1		
1921	Jan 1		
1922	Jan 1		
1923	Jan 1		
1924	Jan 1		
1925	Jan 1		
1926	Jan 1		
1927	Jan 1		
1928	Jan 1		
1929	Jan 1		
1930	Jan 1		
1931	Jan 1		
1932	Jan 1		
1933	Jan 1		
1934	Jan 1		
1935	Jan 1		
1936	Jan 1		
1937	Jan 1		
1938	Jan 1		
1939	Jan 1		
1940	Jan 1		
1941	Jan 1		
1942	Jan 1		
1943	Jan 1		
1944	Jan 1		
1945	Jan 1		
1946	Jan 1		
1947	Jan 1		
1948	Jan 1		
1949	Jan 1		
1950	Jan 1		
1951	Jan 1		
1952	Jan 1		
1953	Jan 1		
1954	Jan 1		
1955	Jan 1		
1956	Jan 1		
1957	Jan 1		
1958	Jan 1		
1959	Jan 1		
1960	Jan 1		
1961	Jan 1		
1962	Jan 1		
1963	Jan 1		
1964	Jan 1		
1965	Jan 1		
1966	Jan 1		
1967	Jan 1		
1968	Jan 1		
1969	Jan 1		
1970	Jan 1		
1971	Jan 1		
1972	Jan 1		
1973	Jan 1		
1974	Jan 1		
1975	Jan 1		
1976	Jan 1		
1977	Jan 1		
1978	Jan 1		
1979	Jan 1		
1980	Jan 1		
1981	Jan 1		
1982	Jan 1		
1983	Jan 1		
1984	Jan 1		
1985	Jan 1		
1986	Jan 1		
1987	Jan 1		
1988	Jan 1		
1989	Jan 1		
1990	Jan 1		
1991	Jan 1		
1992	Jan 1		
1993	Jan 1		
1994	Jan 1		
1995	Jan 1		
1996	Jan 1		
1997	Jan 1		
1998	Jan 1		
1999	Jan 1		
2000	Jan 1		
2001	Jan 1		
2002			

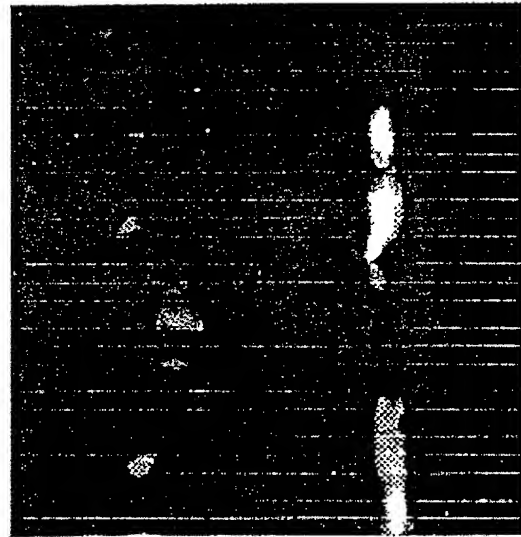


A



B

photoreceptors



bipolar cells

ganglion cells



Fig. 15

AAV-LacZ Transduction of Retinal Ganglia

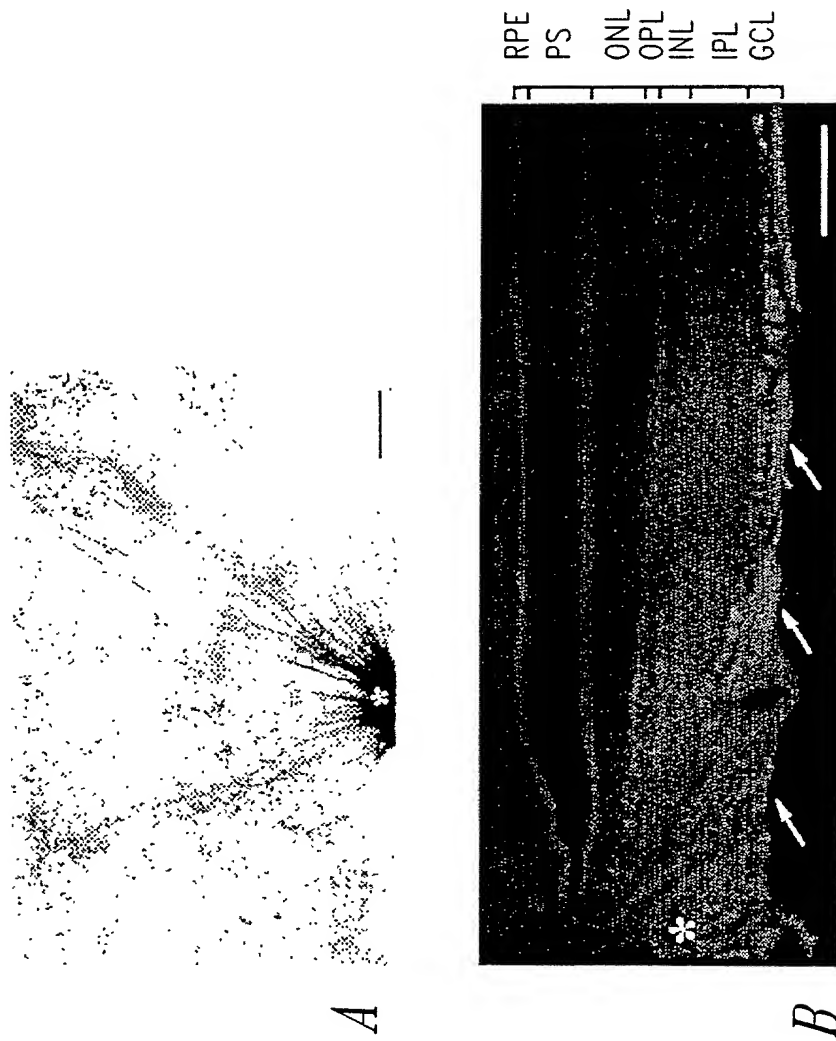
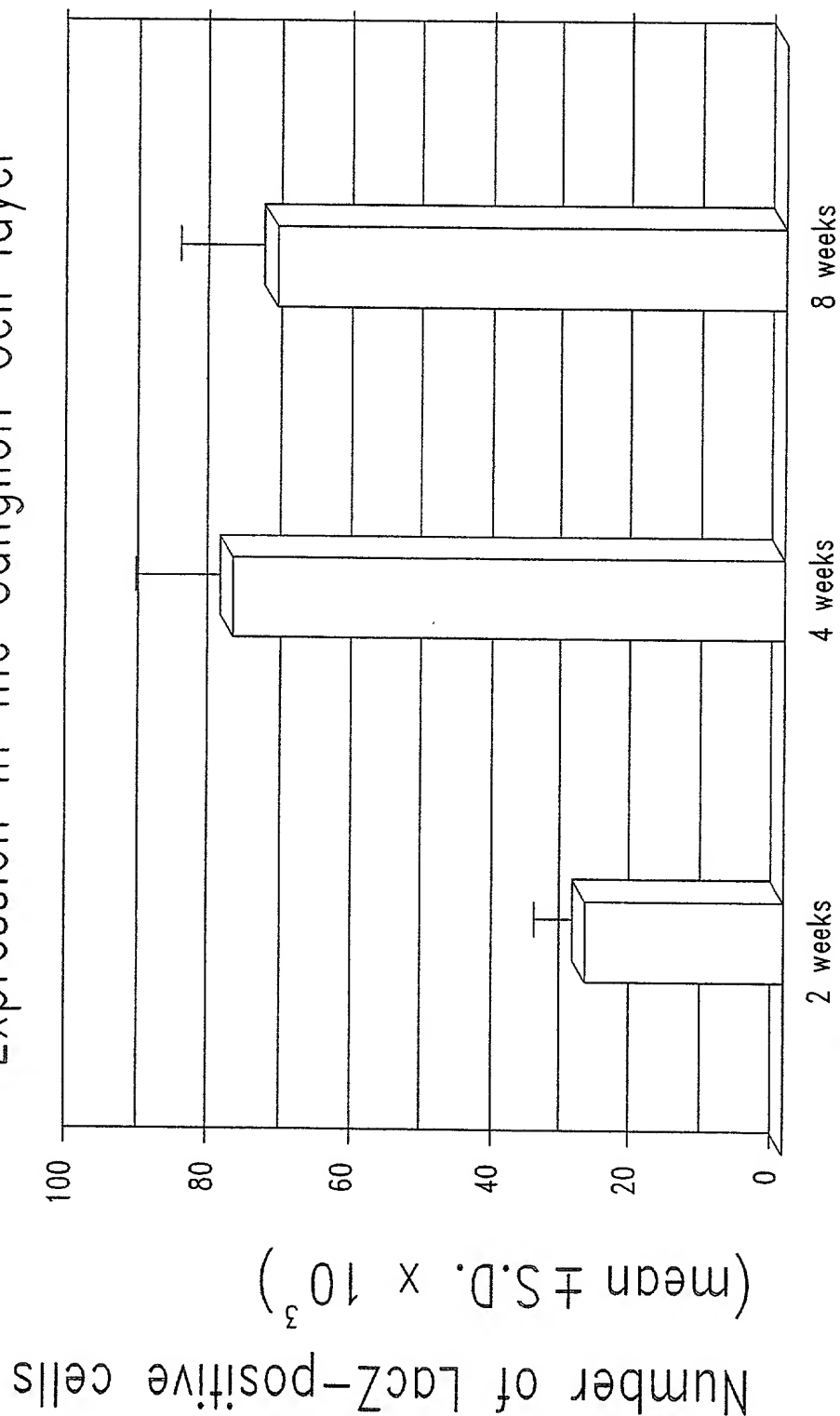


Fig. 16

Time Course of AAV-Medicated Transgene
Expression in the Ganglion Cell layer



Time after intraocular injection of AAV

Fig. 17

Localization of AAV-Medicated LacZ Gene Product in Retrograde Labeled RCG

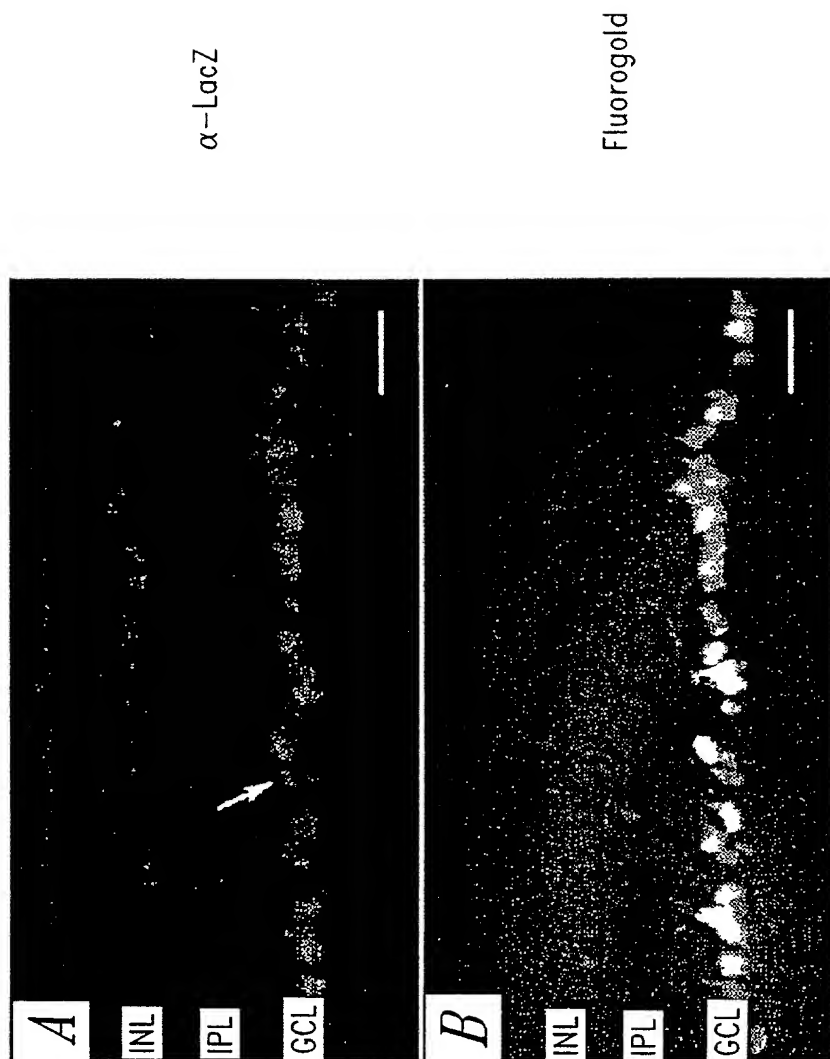


Fig. 18

Quantification of Flourogold and LacZ Positive Cells in the Ganglion Cell Layer Following Intravitreal Injection of rAAV-LacZ

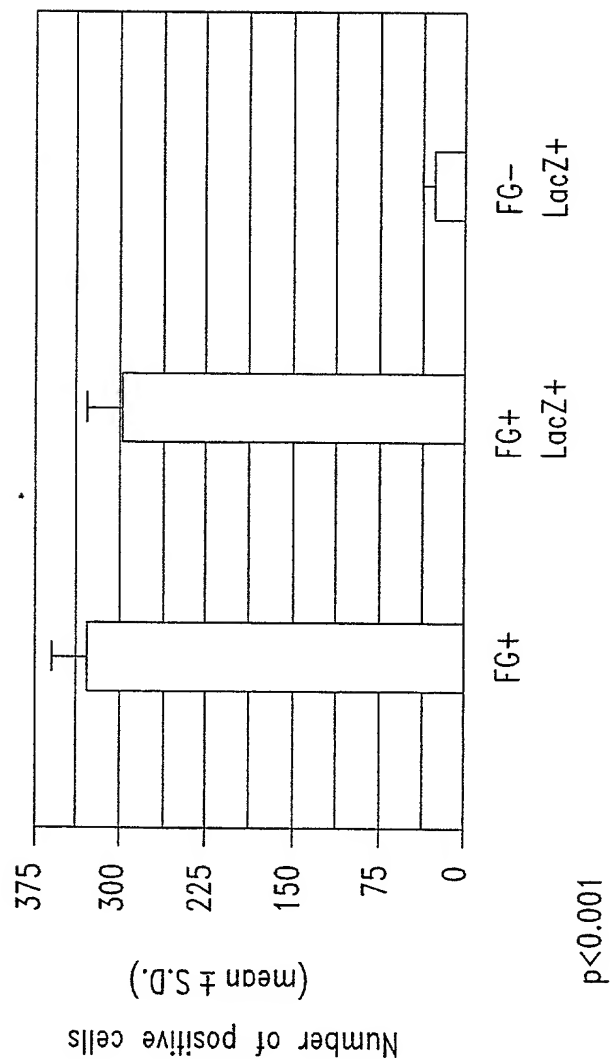


Fig. 19

Localization of Heparin sulfate Proteoglycan, the Cellular Receptor for AAV, in the Adult Rat Retina

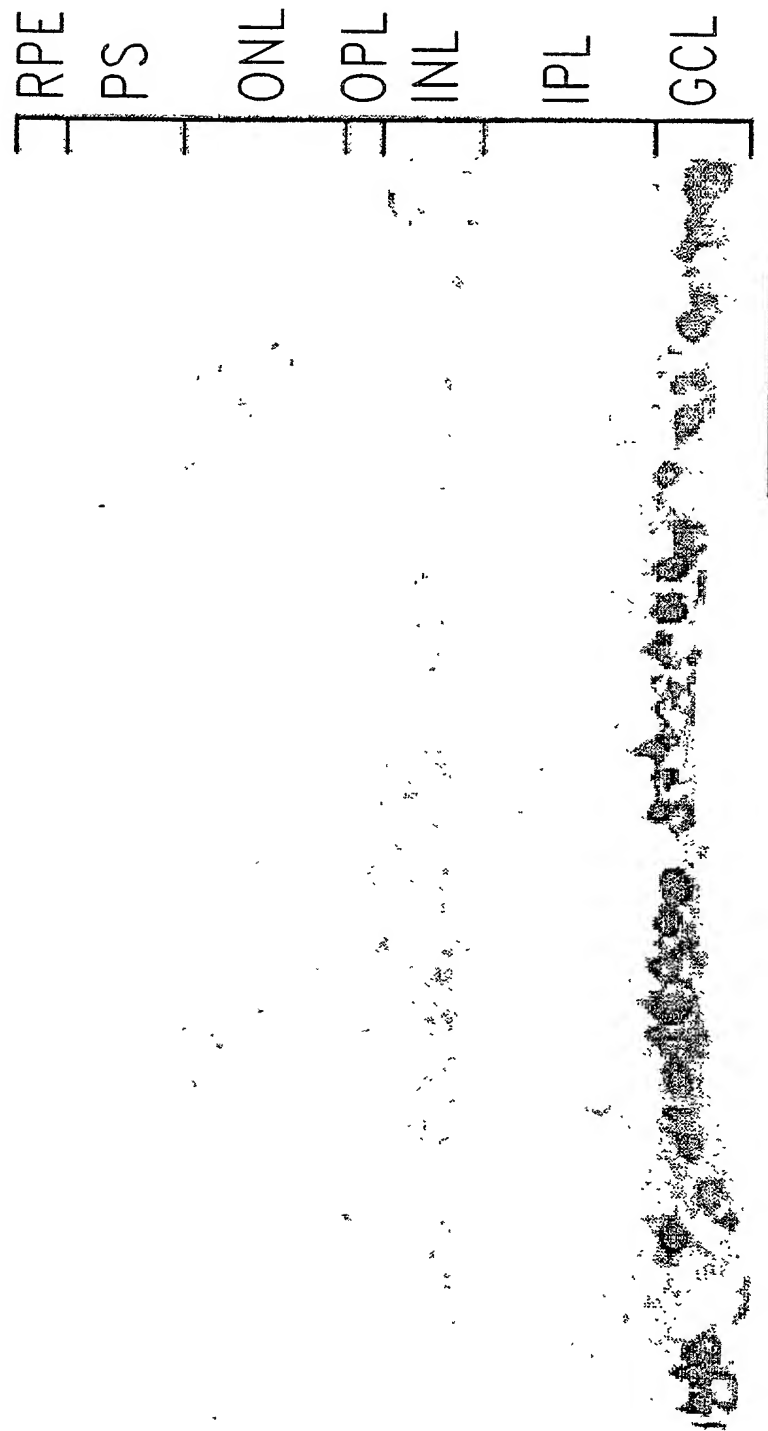


Fig. 20

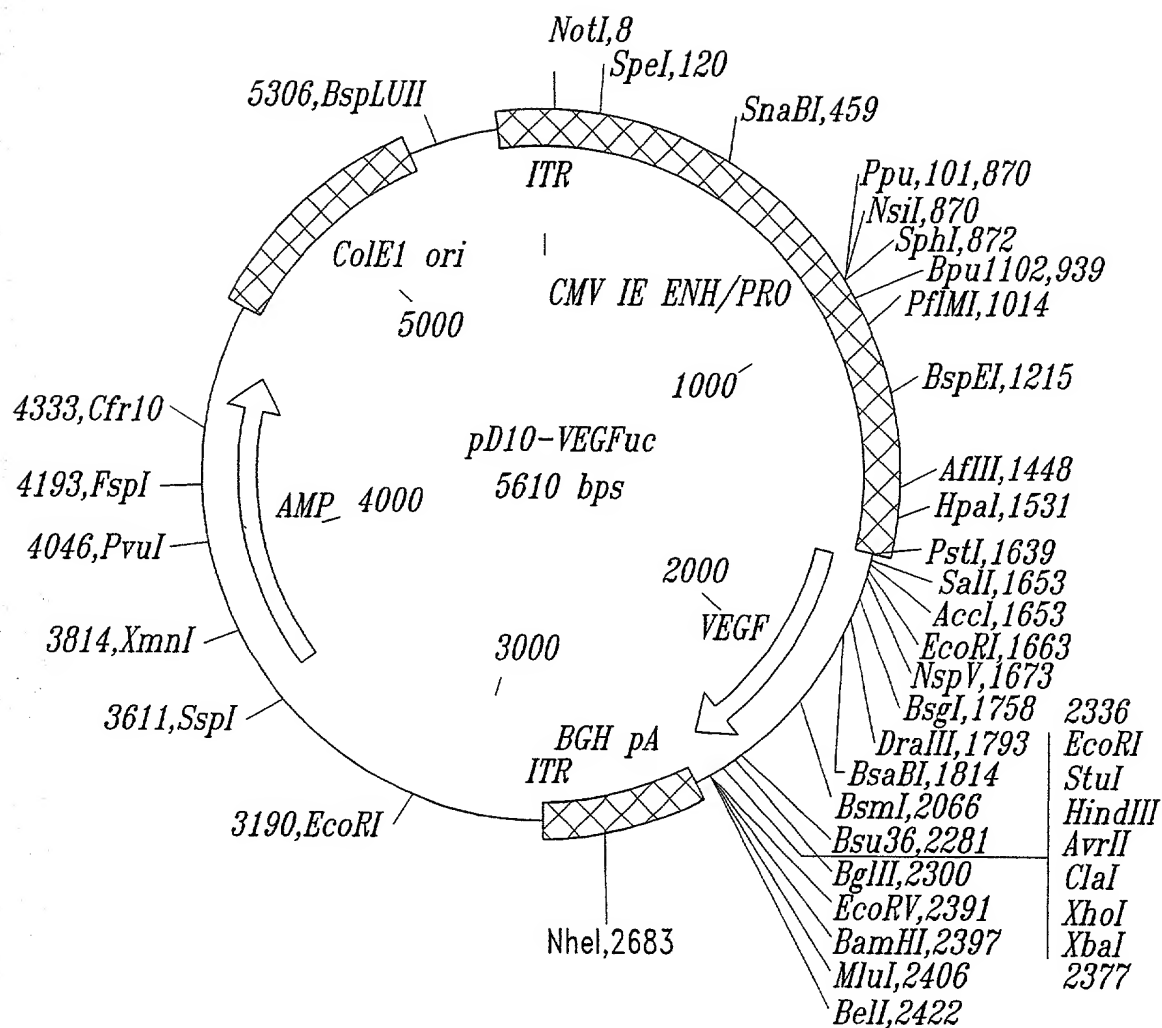


Fig. 21

Nucleotide Sequence of pD10-VEGFuc

AAAACTTGGGCGCGGAATTTGCACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCA
 TGTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGGTTACATAACTTACGGTAAA
 TGGCCCGCCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAAT
 GGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCC
 TGGCATTATGCCCAGTACATGACCTTACGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTA
 CACCAATGGGCGTGATAGCGGTTTACTCACGGGGATTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTTTTGGCACAAAATCAACGGGACT
 TTCCAAAATGTCTGAATAACCCCGCCCGTGTACGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGTGAAACCGTCAG
 ATCGCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACGGGACCGATCCAGCCTCCGCGCCGGGAACGGTGCATTGGAACGCGGATTCC
 CCGTGCCAAGAGTGACGTAAGTACCGCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACTGTTTTTGGCTTGGGCGCTATACACCC
 CCGCTCCTTATGCTATAGGTGATGGTATAGCTTAGGCTATAGGTGTGGGTATTGACCATATTGACCACTCCCCTATTGGTGACGATACTTTCCATTACT
 AATCCATAACATGGCTCTTGGCACAATCTCTATTGGCTATATGCCAATACTCTGTCTTCAGAGACTGACACGGACTCTGTATTTTACAGGATGGG
 GTCCATTATTATTACAAATTCACATATACAACAACGCCGTCCCGGTGCCCGCAGTTTTTATTAACATAGCGTGGGATCTCCGACATCTCGGTACGT
 GTTCGGACATGGGCTCTTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCTGGTCCCATCCGTCCAGCGGCTCATGGTGGCTCGGCAGCTCCTTGCTC
 CTAACAGTGGAGGCCAGACTTAGGCACAGCAATGCCACCACCAGTGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGG
 AGATTGGGCTCGCACCTGGACGCAGATGGAAGACTTAAGGCAGCGGCAGAGAAGATGCAGGCAGCTGAGTTGTTGATTCTGATAAGAGTCAGAGGTAAC
 TCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCTGAGCAGTACTCGTTGCTGCCGCGCGGCCACCAGACATAATAGCTGACAGACTAACAGAC
 GTTCTTTCCATGGGTCTTTCTGCACTACCGTCTGCGACCTAAGAATTCGCCCTTCGAAACCATGAACTTTCTGCTGCTTGGGTGCATTGGAGCCTT
 GCCTTGCTGCTCTACCTCCACCATGCCAAGTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGCAGAATCATCACGAAGTGGTGAAGTTCATGGATGT
 CTATCAGCGCAGCTACTGCCATCCAATCGAGACCTGGTGGACATCTTCCAGGAGTACCCTGATGAGATCGAGTACATCTTCAAGCCATCTGTGTGCCCC
 TGATGCGATGCGGGGCTGCTGCAATGACGAGGGCTGGAGTGTGTGCCACTGAGGAGTCCAACATCACCATGCGAGATTATGCGGATCAAACCTCACCAA
 GGCCAGCACATAGGAGAGATGAGCTTCTACAGCACAAATGTGAATGCAGACCAAGAAAGATAGAGCAAGACAAGAAAAATCCCTGTGGGCTTGCTC
 AGAGCGGAGAAAGCATTTGTTTGTACAAGATCCGAGACGTGTAATGTTCTGCAAAAACACAGACTCGCGTTGCAAGGCGAGGCAGCTTGAGTTAAACG
 AACGTACTTGACAGATGTGACAAGCCGAGGCGGTGAGCCGGGAGGAGGAGGAGCCTCCCTCAGGGTTTCGGGAACAGATCTCTACCAGGAAAGACTGA
 TACAGAAAGGGCGAATTACGGCCTAAGCTTCTAGGTATCGATCTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGA
 TCAGCCTCGACTGTGCTTCTAGTTGCCAGCCATCTGTTGTTGCCCCCTCCCGTGCTTCTTGACCCTGGAAGGTGCCACTCCACTGTCTTTCTTA
 ATAAATGAGGAAATGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGTGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAATA
 GCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGTAGCAAGTCCCATCAGTGATGGAGTTGGCCACTCCCTCTCTGC
 GCGCTCGCTCGCTCACTGAGGCCGGGACCAAAGGTGCGCCGACGCCCGGGCTTTGCCGGGCGGCTCAGTGAGCGAGCGAGCGGCCAGCGATTCTCT
 TGTTTGCTCCAGACTCTCAGGCAATGACCTGATAGCCTTTGTAGAGACCTCTCAAAATAGCTACCCTCTCCGGCATGAATTTATCAGCTAGAACGGTTGA
 ATATCATATTGATGGTGATTGACTGTCTCCGGCCTTTCTACCCGTTGAATCTTTACCTACACATTACTCAGGCATTGCATTTAAATATATGAGGGTT
 CTAATAATTTTATCCTTGCGTTGAAATAAAGGCTTCTCCCGCAAAGTATTACAGGGTCATAATGTTTTTGGTACAACCGATTAGCTTTATGCTCTGAG
 GCTTATTGCTTAATTTGCTAATCTTTGCTTGCCTGTATGATTTATTGGATGTTGGAATTCCTGATGCGGTATTTTCTCCTTACGCATCTGTGCGGTA
 TTTCACACCGCATATGGTGACTCTCAGTACAATCTGCTCTGATGCCGATAGTTAAGCCAGCCCCGACACCGCCAACACCCGCTGACGCGCCCTGACGG
 GCTGTCTGCTCCCGCATCCGCTTACAGACAAGCTGTGACCGTCTCCGGGAGCTGCATGTGTGAGAGGTTTTACCGTCATACCCGAACGCGCGAGACG
 AAAGGGCCTCGTGATACGCCTATTTTATAGGTTAATGTATGATAATAATGGTTTCTAGACGTGAGTGGCACTTTTCGGGGAATGTGCGCGGAACCC
 CTATTTGTTTATTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAATAATATTGAAAAAGGAAGATGAGT

Fig. 22A

ATCAACATTTCCGTGTCGCCCTTATCCCTTTTTGCGGCATTTGCCTTCCTGTTTTGCTCACCAGAAACGCTGGTGAAAGTAAAGATGCTGAAGA
 TCAGTTGGGTGCACGAGTGGGTTACATCGAAGTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTCGCCCCGAAGAAGCTTTTCCAATGATGAGCACTT
 TTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGCAAGAGCAACTCGGTCGCCGCATACACTATTCTCAGAATGACTTGGTTGAGTAC
 TCACCAGTCACAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAACCATGAGTGATAAACTGCGGCCAACTTACTTCT
 GACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGACAACATGGGGGATCATGTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCA
 TACCAAACGACGAGCGTGACACCAGATGCCTGTAGCAATGGCAACAACGTTGCGCAAACTATTAACGGCGAACTACTTACTCTAGCTTCCCGGCAACAA
 TTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCATTCTGCGCTCGGCCCTCCGGCTGGCTGGTTATTGCTGATAAATCTGAGCCGGTGAGCG
 TGGGTCTCGCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGAGTCAGGCAACTATGGATGAACGAA
 ATAGACAGATCGCTGAGATAGGTGCCTCACTGATTAAGCATTGGTAACGTGCAGACCAAGTTTACTCATATATACTTTAGATTGATTTAAACTTCATTTT
 TAATTTAAAGGATCTAGGTGAAGATCCTTTTGTAAATCTCATGACCAAAATCCCTAACGTGAGTTTTCGTTCAGTGAGCGTCAGACCCCGTAGAAAA
 GATCAAGGATCTTCTTGAGATCCTTTTTTCTGCGGTAATCTGCTGCTTGCAAAACAAAAAACACCGCTACCAGCGGTGGTTTGTTCGCCGATCAAG
 AGCTACCAACTCTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATACAAATACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAAC
 TCTGTAGCACCGCTACATACCTCGCTCTGCTAATCCTGTTACCAAGTGGCTGCTGCCAGTGGCGATAAGTCGTGCTTACCGGTTGGACTCAAGACGATA
 GTTACCGGATAAAGGCGCAGCGGTGCGGCTGAACGGGGGTTCTGTGCACACAGCCAGCTTGGAGCGAAGCCTACACCGAAGTGAATACCTACAGCGTG
 AGCTATGAGAAAGCGCCACGCTTCCGAAGGGAGAAAGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCAGGG
 GGAACGCTGGTATCTTTATAGTCTGTGCGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGCGGAGCCTATGAAAAA
 CGCCAGCAACGCGGCTTTTACGGTTCTGGGCTTTTGCTGGCCTTTTGCTCACATGTTCTTCTGCGTTATCCCTGATTCTGTGGATAACCGTATTA
 CCGCCTTTGAGTGAGCTGATACCGCTCGCCGACGCCAAGACGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCCAATACGCAACCGCCT
 CTCCCGCGCGTTGGCCGATTCAATATGCAGCTGGCGCGCTCGCTCGCTCACTGAGGCCGCCCGGGCAAAGCCCGGGCGTCGGGCGACCTTTGGTTCGCC
 GGCTCAGTGAGCGAGCGAGCGCGCAGAGAGGAGTGGCCAACCTCATCACTGAT

Fig. 22B

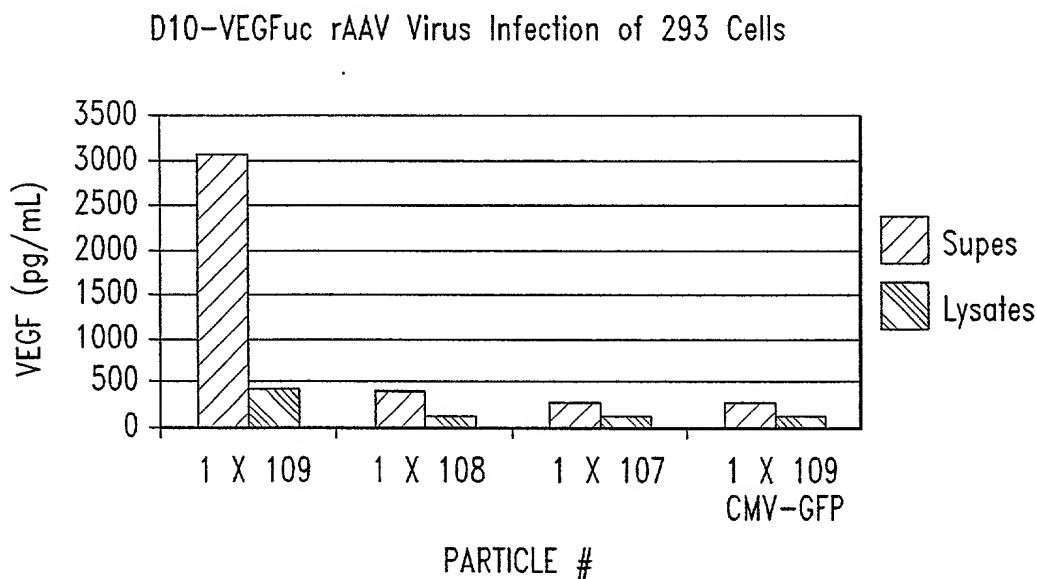
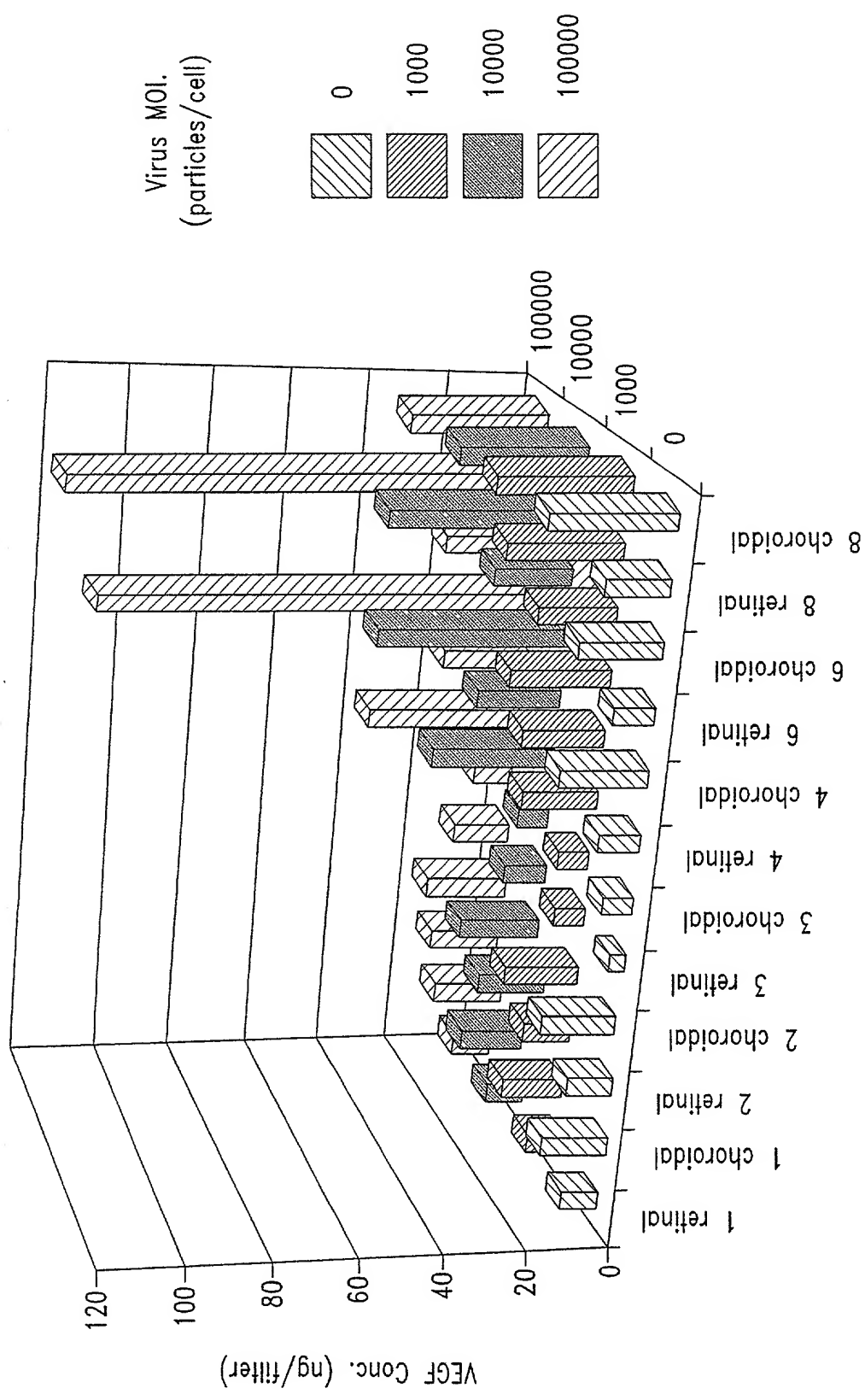


Fig. 23



Time after transfection (Day) and Polarity

Fig. 24

VEGF Secretion by hRPE After Infection with VEGF AV

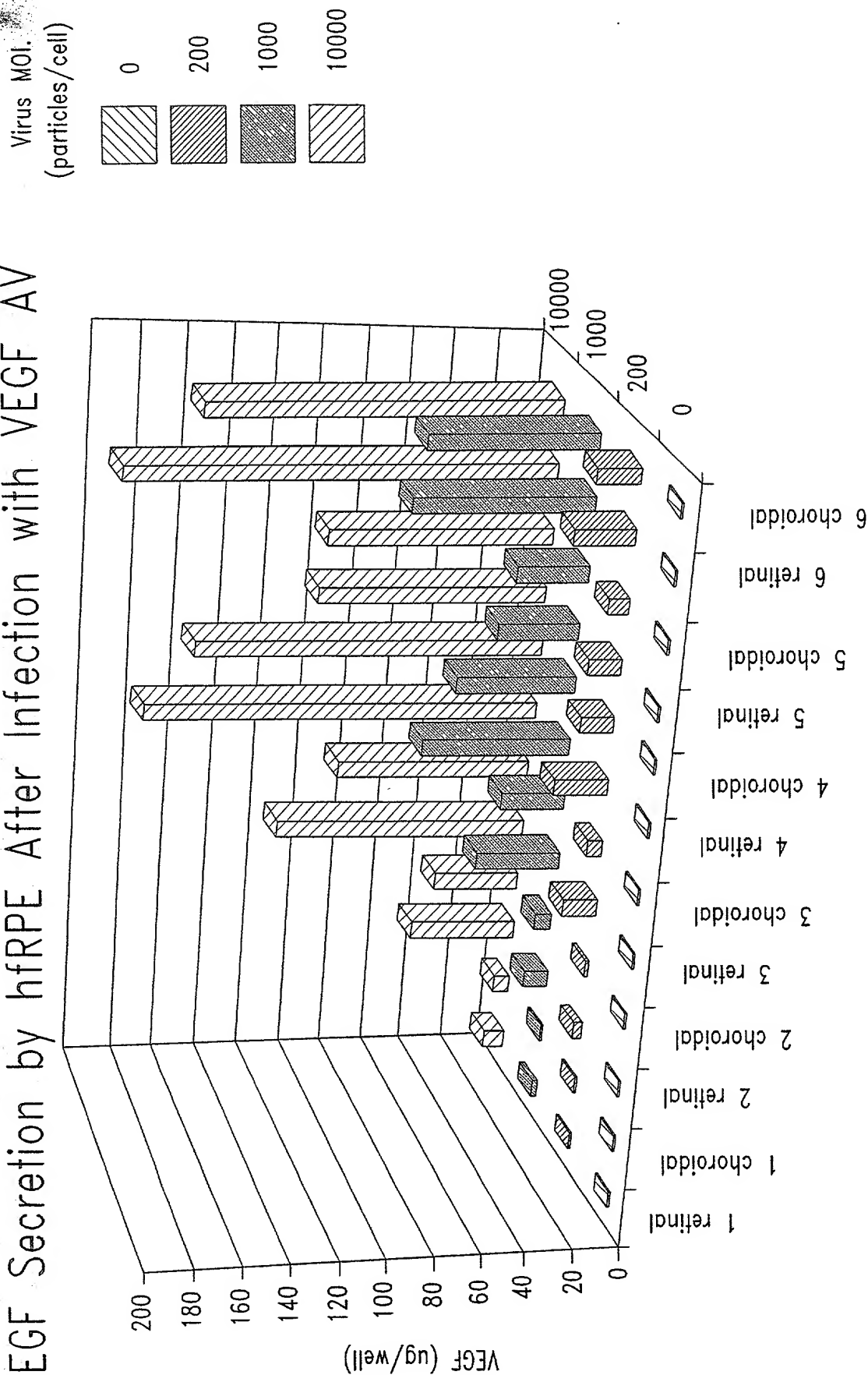


Fig. 25

Time after Infection (Day) and Polarity

Resistance of hRPE After Infection with VEGF AV

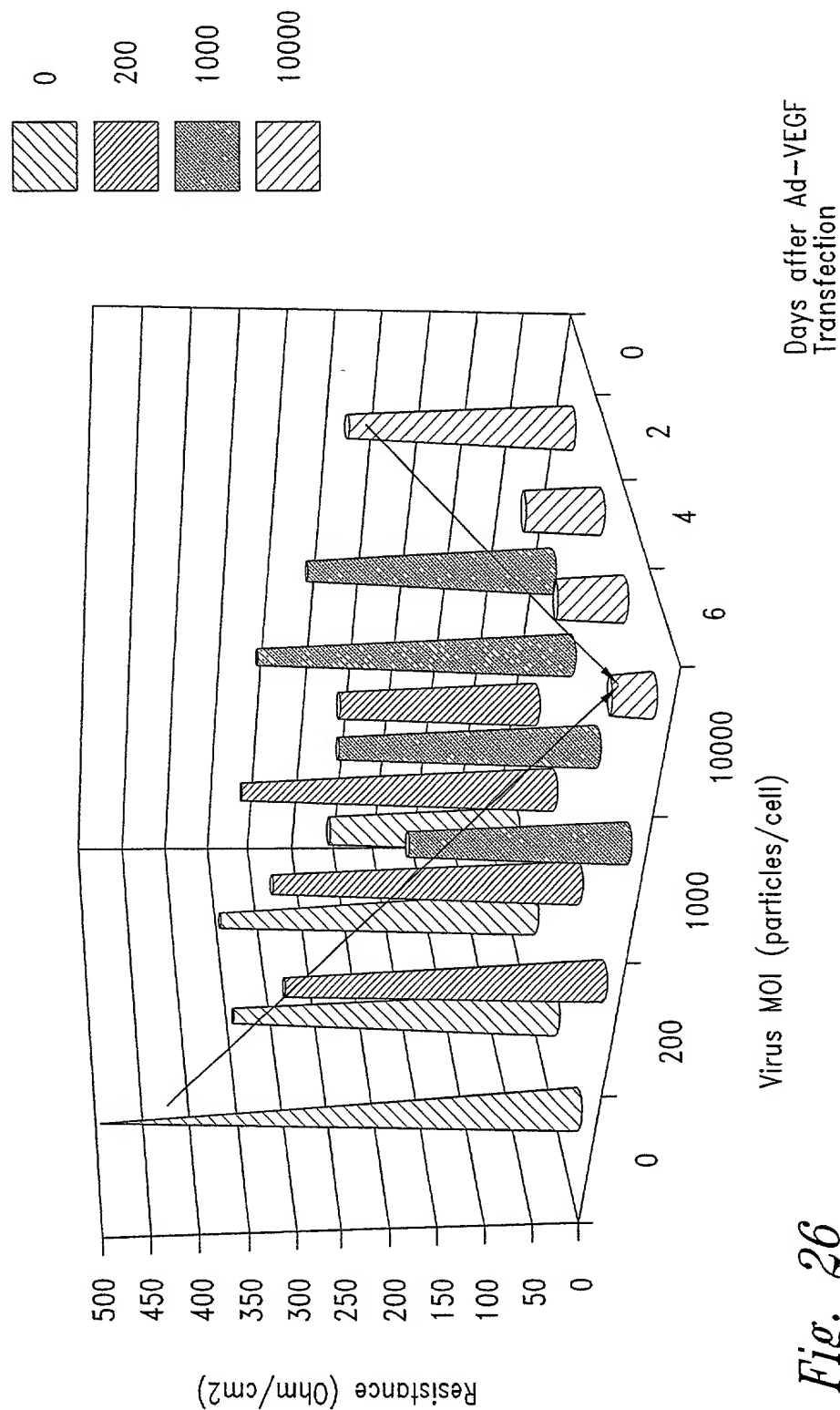


Fig. 26

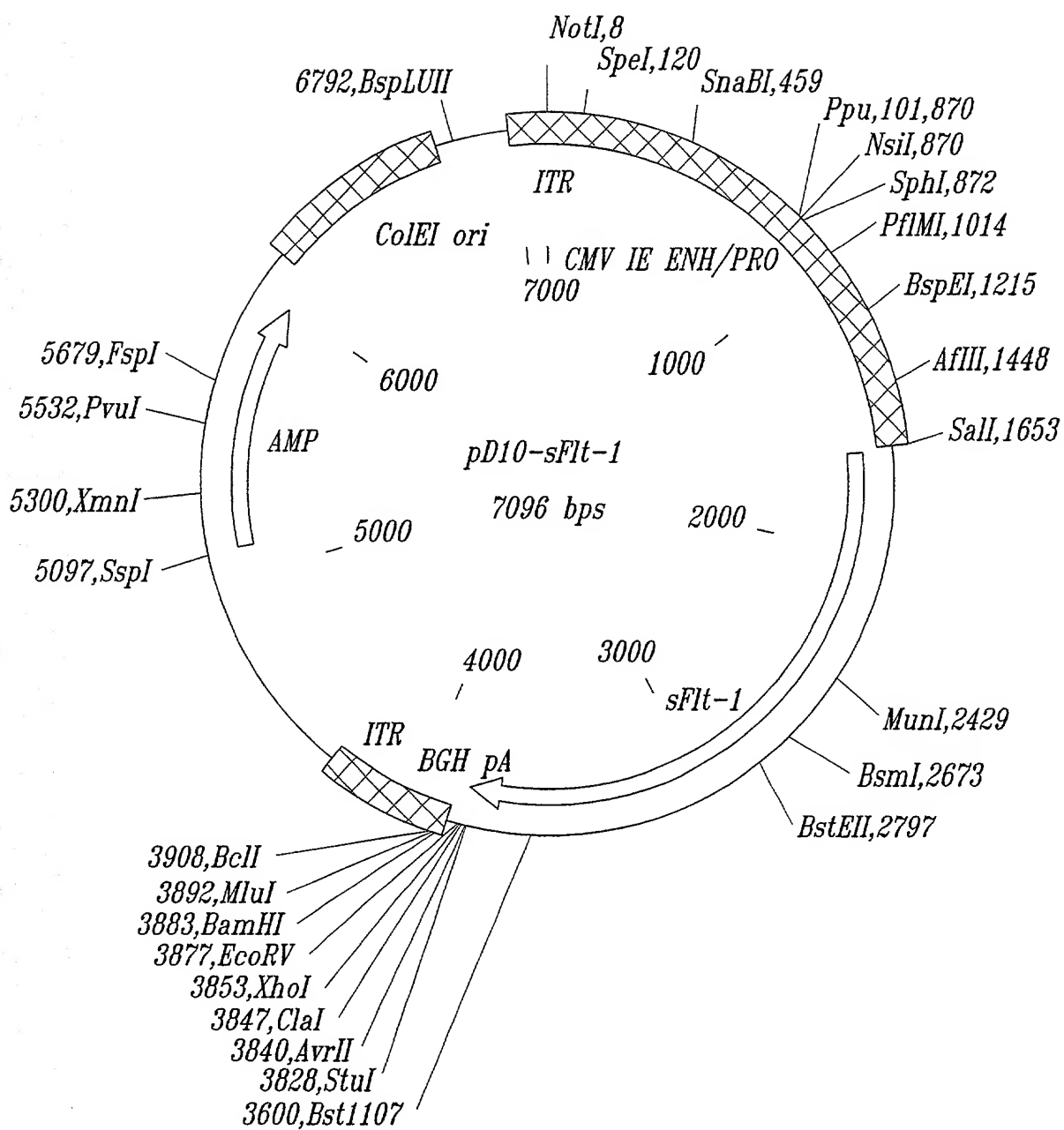


Fig. 27

Nucleotide Sequence of pD10-SFlt-1

AAAACTTGC GGCCGCGGAATTTGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGC
 CATGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAACTTACGG
 TAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGAC
 GTCAATGGGTGGAGTATTTACGGTAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAAT
 GGCCCGCTGGCATTATGCCAGTACATGACCTTACGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT
 TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTGTTGGCACCAAA
 ATCAACGGGACTTTCCAAATGTCGTAATAACCCCGCCCGTTGACGCAATGGGCGGTAGGCGGTGACGGTGGGAGGTCTATATAAGCAGAGCTCGTT
 TAGTGAACCGTCAGATCGCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAACGGTGCA
 TTGGAACGGGATTCCCGTGC AAGAGTGACGTAAGTACCGCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACTGTTTTGG
 CTTGGGGCTATACACCCCGCTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTTGGTTATTGACCATTATTGACCACTCCCTATTGG
 TGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAATATCTCTATTGGCTATATGCCAATACTCTGTCTTCAGAGACTGACACGGA
 CTCTGATTTTTACAGGATGGGGTCCATTTATTATTTACAATTCACATATACAACAACGCGTCCCGCTGCCCGCAGTTTTTATTAACATAGCGTG
 GGATCTCCGACATCTCGGTACGTGTTCCGGACATGGGCTCTTCTCGGTAGCGCGGAGCTTCCACATCCGAGCCCTGGTCCCATCCGTCACGCGGT
 CATGGTCGCTCGGCAGTCTTGTCTTAACAGTGGAGGCCAGACTTAGGCACAGCACAAATGCCACCACCAGTGTGCCGCACAAGGCCGTGGCGG
 TAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCTGGACGCAGATGGAAGACTTAAGGCAGCGGCAGAAGAAGATGCAGGCAGCTGAGT
 TGTGTTATCTGATAAGAGTCAGAGGTAACCTCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCTGAGCAGTACTCGTTGCTGCCGCGCGCGC
 CACCAGACATAATAGCTGACAGACTAACAGACTGTTCTTTCCATGGGTCTTTTCTGCAGTCACCGTCGTCGACCTAAGAATTGCGCCCTTACCATGG
 TCAGTACTGGGACACCGGGGCTCTGCTGTGCGCGCTGCTCAGCTGTCTGCTTCTCACAGGATCTAGTTCAGGTTCAAAATTAAGAGTCTGAACTGA
 GTTTAAAGGCACCCAGCACATCATGCAAGCAGGCCAGACACTGCATCTCCAATGCAGGGGGGAAGCAGCCATAAATGGTCTTTGCCGAAATGGTGA
 GTAAGGAAAGCGAAAGGCTGAGCATAACTAAATCTGCTGTGGAAGAAATGGCAACAATTCTGCAGTACTTTAACCTTGAACACAGCTCAAGCAAACC
 ACACTGGCTTCTACAGCTGCAAAATATCTAGCTGTACCTACTTCAAGAAGAAGGAACAGAATCTGCAATCTATATTTATTAGTGATACAGGTAGAC
 CTTTCGTAGAGATGTACAGTGAATCCCGAAATTATACACATGACTGAAGGAAGGAGCTCGTCATTCCCTGCCGGTTACGTCACCTAACATCACTG
 TTACTTTAAAAAGTTTCCACTTGACACTTTGATCCCTGATGGAACCGCATAATCTGGGACAGTAGAAAGGGCTTCATCATATCAATGCAACGTACA
 AAGAAATAGGGCTTCTGACCTGTGAAGCAACAGTCAATGGGCAATTTGTATAAGACAAATATCTCACACATCGACAAACCAATACAATCATAGATGTCC
 AAATAAGCACACCACGCCAGTCAAATTACTTAGAGGCCATACTTGTCTCAATTGTACTGTACCACTCCCTTGAACACGAGAGTTCAAATGACCT
 GGAGTTACCCTGATGAAAAAATAAGAGAGCTTCGTAAGCGCAGCAATTGACCAAGCAATCCCATGCCAACATATCTACAGTGTCTTACTATTG
 ACAAATGCAGAACAAAGACAAAGGACTTTATACTTGTCTGTAAGGAGTGGACCATATTCAAATCTGTTAACACCTCAGTGCATATATATGATAAAG
 CATTCACTACTGTGAAACATCGAAACAGCAGGTGCTTGAACCGTAGCTGGCAAGCGGTCTTACCGGCTCTCTATGAAAGTGAAGGCAATTCCTCGC
 CGGAAGTTGATGGTTAAAGATGGGTTACCTGCGACTGAGAAATCTGCTCGCTATTTGACTCGTGGCTACTCGTTAATTATCAAGGACGTAACGAAG
 AGSATGCAGGGAATTATACAATCTTGCTGAGCATAAAACAGTCAAATGTGTTAAAAACCTCACTGCCACTCTAATTGTCAATGTGAACCCAGATT
 ACGAAAAGGCGGTGTCATCGTTTCCAGACCGGCTCTCTACCACTGGGCAGCAGACAAATCCTGACTTGTACCGCATATGGTATCCCTCAACCTACAA
 TCAAGTGGTTCTGGCACCCTGTAAACATAATCATTCCGAAGCAAGGTGTGACTTTTGTCCAAATAATGAAGAGTCTTTATCCTGGATGCTGACAGCA
 ACATGGGAAACAGAATTGAGAGCATCACTCAGCGCATGGCAATAATAGAAGGAAAGAAATGAAGTGGTAGCACCTTGGTTGTGGCTGACTCTAGAATTT
 CTGGAATCTACATTTGCATAGCTTCCAATAAGTTGGGACTGTGGGAAGAAACATAAGCTTTTATATCACAGATGTGCCAAATGGGTTTTCATGTTAACT
 TGGAATAATGCGACGGAAGGAGAGGACCTGAACTGTCTTGACAGTTAACAAGTTCTTATACAGAGACGTTACTTGGATTTTACTGCGGACAGTTA
 ATAACAGAACATGCACTACAGTATTAGCAAGCAAAAATGGCCATCACTAAGGAGCACTCCATCACTCTTAATCTTACCATCATGAATGTTCCCTGC
 AAGATTAGGCACCTATGCTGCAGAGCCAGGAATGTATACAGGGGAAGAAATCTCCAGAAGAAAGAAATTACAATCAGAGGTGAGCACTGCAACA
 AAAAGGCTGTTTTCTCTCGATCTCCAAATTTAAAGCACAGGAATGATTGTACCACACAAAGTAATGTAAACATTAAAGGACTCATTAAAAAGTAA
 CAGTTGTCTCATATCATTTGATTTATTGTCACTGTTGCTAACTTTCAGGCTCAAGGGCGAATTCAGGCCTAAGCTTCTAGGTATCGATCTGAGCAA
 GTCTAGAAAGCATGGATATCGGATCCACTACGGTTAGAGTCTGCTGATCAGCTCGACTGTGCTTCTAGTTGCCAGCCATCTGTTGTTGCCCTC

Fig. 28A

CCCC GTGCCTT CCTTGACCCTGGAAGGTGCCACTCCACTGTCTTTCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTAT
 TCTGGGGGGTGGGGTGGGCGAGGACAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGTGGGA
 GGATCATCCAGCTAGCAAGTCCCATCAGTGATGGAGTTGGCCACTCCCTCTCTGCGCGCTCGCTCGCTCACTGAGGCCGGGCGACCAAGGTCGCCCCGA
 CGCCCGGGCTTTGCCCGGGCGGCTCAGTGAGCGAGCGAGCGGCCAGCGATTCTCTTGTGCTCCAGACTCTCAGGCAATGACCTGATAGCCTTTGT
 AGAGACCTCTCAAAAATAGCTACCCCTCTCCGCGATGAATTTATCAGCTAGAACGGTTGAATATCATATTGATGGTGATTTGACTGTCTCCGGCCTTTCT
 CACCCGTTTGAATCTTTACCTACACATTACTCAGGCATTGCATTTAAAAATATAGAGGGTTCTAAAAATTTTATCCTTGCGTTGAAATAAAGGCTTCT
 CCGCAAAAGTATTACAGGGTCATAATGTTTTTGGTACAACCGATTAGCTTTATGCTCTGAGGCTTTATGCTTAATTTTGCTAATTTCTTGCTTGC
 CTGTATGATTTATGATGTTGGAATTCCTGATGCGGTATTTCTCCTTACGCATCTGTGCGGTATTTACACCGCATATGGTGACTCTCAGTACAAT
 CTGCTCTGATGCCGCATAGTTAAGCCAGCCCGACACCCGCCAACCCCGCTGACGCGCCCTGACGGGCTTGTCTGCTCCCGGCATCCGCTTACAGACA
 AGCTGTGACCGTCTCCGGGAGCTGCATGTGTGAGAGTTTTACCGTCATACCGAAACGCGCGAGACGAAAGGGCCTCGTGATACGCCATTTTTATA
 GGTTAATGTCATGATAAATAGTTTCTTAGACGTCAGGTGGCACTTTTCGGGGAATGTGCGCGGAACCCCTATTTGTTTTATTTTCTAAATACATTC
 AAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAATAATTTGAAAAAGGAAGAGTATGAGTATCAACATTTCCGTGTCGCCCTTAT
 TCCCTTTTTGCGGCATTTTGCTTCTGTTTTGCTCACCCAGAAACGCTGGTGAAAGTAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTTA
 CATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTCCGCCGAAGAACGTTTTCCAATGATGAGCACTTTTAAAGTTCGTATGTGGCGC
 GGTATTATCCCGTATTGACGCCGGGCAAGAGCAACTCGGTGCGCGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTCACAGAAAAGCA
 TCTTACGGATGGCATGACAGTAAGAGAATTATGCACTGCTGCCATAACCATGAGTGATAACACTGCGGCCAACTTACTTCTGACAACGATCGGAGGACC
 GAAGGAGCTAACCGCTTTTTTGACAACATGGGGGATCATGTAACCTGCTTGTGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCG
 TGACACCAGATGCCTGTAGCAATGGCAACAACGTTGCGCAACTATTAAGTGGCAACTACTTACTCTAGCTTCCCGGCAACAATTAAGACTGGAT
 GGAGGCGGATAAAGTTGAGGACCACTTCTGCGCTCGGCCCTCCGGCTGGCTGGTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGG
 TATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAATAGACAGAT
 CGCTGAGATAGGTGCTCACTGATTAAGCATTGGTAAGTGTGAGACCAAGTTACTCATATATACTTTAGATTGATTTAAACCTTCATTTTAAATTTAA
 AAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAA
 AGGATCTTCTGAGATCCTTTTTCTGCGCGTAATCTGCTGCTTGCAACAAAAAACCCGCTACCAGCGGTGGTTTGTGCGGATCAAGAGCT
 ACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAAGAGCGCAGATACCAAACTGTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTC
 TGTAGCACCGCTACATACCTCGCTCTGCTAATCCTGTTACCAAGTGGCTGCTGCCAGTGGCGATAAGTCGTGCTTACCAGGTTGGACTCAAGACGATA
 GTTACCGGATAAAGCGCAGCGGTGCGGCTGAACGGGGGTTCTGTCACACAGCCAGCTTGGAGCGAAGCACTACACCGAACTGAGATACCTACAGCG
 TGAGCTATGAGAAAGCGCCACGCTTCCGAAGGGAGAAAGCGGACAGGTATCCGTAAGCGGCAGGGTCGGAACAGGAGAGCGACGAGGGAGCTTCC
 AGGGGGAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTCCGCCCTCTGACTTGAGCGTCGATTTTGTGATGCTCGTCAGGGGGCGGAGCCTATG
 GAAAAACGCCAGCAACGCGGCTTTTTACGGTTCTGGCCTTTTGTGGCCTTTTGTGTCATGTTCTTCTGCGTTATCCCTGATTCTGTGGATAA
 CCGTATTACCGCTTTGAGTGAGCTGATACCGCTCGCCGACGCCAAGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCCAATACG
 CAAACCGCCTCTCCCGCGCGTTGGCCGATTCTTAATGACGCTGGCGCGCTCGCTCGCTCACTGAGGCCGCCCGGGCAAGCCCGGGCGTCGGGCGAC
 CTTTGGTCGCCCGGCTCAGTGAGCGAGCGAGCGCAGAGAGGGAGTGGCCAACCTCATCACTGAT

Fig. 28B

HumanFGF-20

atggctcccttagccgaagtcgggggctttctgggcggcctggagggcttggccagcag
M A P L A E V G G F L G G L E G L G Q Q

gtgggttcgcatttcctgttgccctcctgccgggagcggccgctgctgggcgagcgc
V G S H F L L P P A G E R P P L L G E R

aggagcgcggcggagcggagcgcgcgcggcgggctgcgcagctggcgcacctg
R S A A E R S A R G G P G A A Q L A H L

cacggcatcctgcgcgcggcagctctattgccgcaccggcttcacactgcagatcctg
H G I L R R R Q L Y C R T G F H L Q I L

cccgcggcagcgtgcagggcacccggcaggaccacagcctcttcggtatcttgaattc
P D G S V Q G T R Q D H S L F G I L E F

atcagtgtggcagtgaggactggcagctattagaggtgtggacagtggtctctatcttga
I S V A V G L V S I R G V D S G L Y L G

atgaatgacaaaggagaactctatggatcagagaaacttacttccgaatgcacatcttagg
M N D K G E L Y G S E K L T S E C I F R

gagcagtttgaagagaactggtataacacctattcatctaacatatataaacatggagac
E Q F E E N W Y N T Y S S N I Y K H G D

actggccgcaggtatthtggcacttaacaaagacggaactccaagagatggcgccagg
T G R R Y F V A L N K D G T P R D G A R

tccaagaggcatcagaaatttacatttcttacctagaccagtgatccagaaagagtt
S K R H Q K F T H F L P R P V D P E R V

ccagaattgtacaaggacactactgatgtacactga
P E L Y K D L L M Y T

Fig. 29

Mouse FGF-21 cDNA in pGEM-T

gagcgcagccctgatggaatggatgagatctagagttgggaccctgggactgtgggtccg

SEQ ID NO: 1

M E W M R S R V G T L G L W V R

SEQ ID NO: 2

actgctgctggctgtcttcctgctgggggtctaccaagcatacccatccctgactccag

L L L A V F L L G V Y Q A Y P I P D S S

ccccctcctccagtttgggggtcaagtccggcagaggtacctctacacagatgacgacca

P L L Q F G G Q V R Q R Y L Y T D D D Q

agacactgaagccacctggagatcagggaggatggaacagtggtaggcgcagcacaccg

D T E A H L E I R E D G T V V G A A H R

cagtccagaaagtctcctggagctcaaagccttgaagccaggggtcattcaaatcctggg

S P E S L L E L K A L K P G V I Q I L G

tgtcaaagcctctaggtttctttgccaacagccagatggagctctctatggatcgctca

V K A S R F L C Q Q P D G A L Y G S P H

ctttgatcctgaggcctgcagcttcagagaactgctgctggaggacggttacaatgtgta

F D P E A C S F R E L L L E D G Y N V Y

ccagtctgaagcccatggcctgcccctgcgtctgcctcagaaggactcccaaaccagga

Q S E A H G L P L R L P Q K D S P N Q D

tgcaacatcctggggacctgtgcgcttctgccatgccaggcctgctccacgagcccca

A T S W G P V R F L P M P G L L H E P Q

agaccaagcaggattcctgccccagagccccagatgtgggtcctctgacccctgag

D Q A G F L P P E P P D V G S S D P L S

catggtagagcctttacagggccgaagccccagctatgcgtcctgactcttctctgaatc

M V E P L Q G R S P S Y A S

Fig. 30

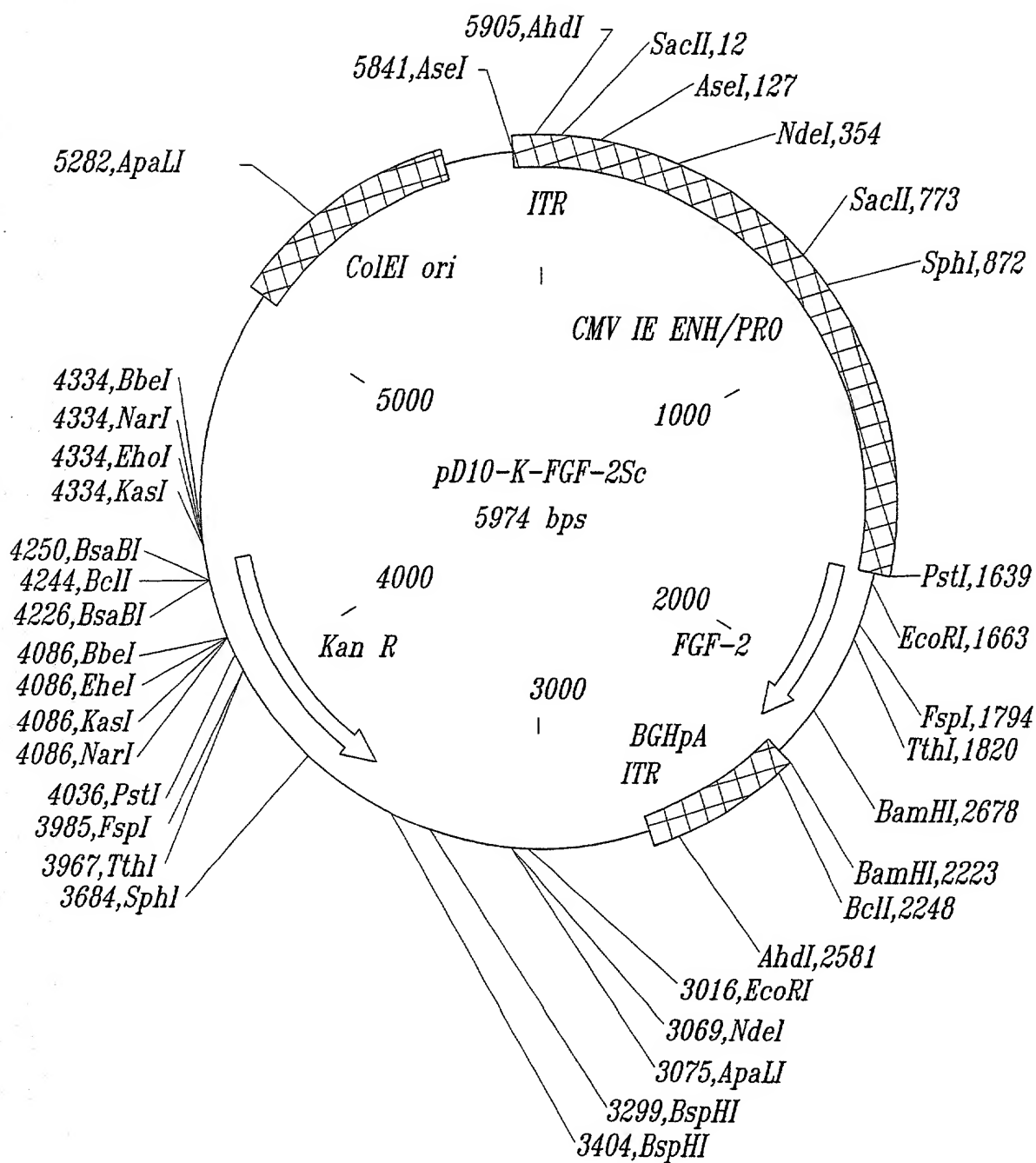


Fig. 31

TGCTCTGATGCCGCATAGTTAAGCCAGCCCCGACACCCGCCAACACCCGCTGACGCGCCCTGACGGGCTTGCTGCTCCCGGCATCCGCTTACAGAC
AAGCTGTGACCGTCTCCGGGAGCTGCATGTGTGAGAGTTTTACCGTCATACCGAAACGCGCGAGACGAAAGGGCTCGTGATACGCCTATTTTT
ATAGGTTAATGTCATGATAATAATGGTTTCTTAGACGTAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTATTTTTCTAAATA
CATTCAAATATGTATCCGCTCATGAGACAATAACCTGATAAATGCTTCAATAATGTACCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATC
GGGAGCGCGGATACCGTAAAGCAGGAGGAGCGGTGAGCCATTGCTTCAGCAATATCACGGGTAGCCAACGCTATGCTCTGATAGCGGTCCGCCA
CACCCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTACGACGAGATCCTC
GCCGTGCGGCATGCGCGCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGCCCTGATGCTCTTCGTCAGATCATCTGATCGACAAGACCGGCT
TCCATCCGAGTACGTGCTCGTTCGATGCGATGTTTCGCTTGGTGGTCAATGGGCAGGTAGCCGATCAAGCGTATGCAGCCCGCATTGCATCAG
CCATGATGGATACTTTTCGCGAGGAGCAAGGTGAGATGACAGGAGATCCTGCCCGGCACTTCGCCAATAGCAGCCAGTCCCTTCCCGTTCACT
GACAACGTGAGCAGCAGTCGCGCAAGGAACGCCCGTCTGGCCAGCCACGATAGCCGCGCTGCCTCGTCTGTCAGTTCATTAGGGCACCAGGAGG
TCGGTCTTGACAAAAAGAACCGGGCGCCCTGCGCTGACAGCCGGAACACGCGGCATCAGAGCAGCCGATTGCTGTTGTGCCAGTCATAGCCGA
ATAGCCTCTCCACCAAGCGCGCGGAGAACCTGCGTGCAATCCATCTTGTTCATCATGCGAAACGATCCTCATCTGTCTCTTGATCAGATCTTGA
TCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCATCCAGTTTACTTTGACGGGCTTCCCAACCTTACCAGAGGGCGCCAGCTGGCAATTCC
GGTTCGCTTGTGTCATAAAACCGCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGTACCTGCTTCTCTTTGCGCTTGGTTTTCCCTTG
TCCAGATAGCCAGTAGCTGACATTCATCCGGGTGAGCAGCGTTTCTGCGGACTGGCTTCTACGTGTTCCGCTTCTTTAGCAGCCCTTGGCGCC
TGAGTGCTTGGCGCAGCGTGAAGCTGTCAATTCGCGTTAAATTTTTGTTAAATCAGTCAATTTTTAACCAATAGGCCGAAATCGGCAAAATCCCT
TATAAATCAAAGAATAGCCCGAGATAGGTTGAGTGTGTTCCAGTTTGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGC
GAAAAACCGTCTATCAGGGCGATGGCGGATCAGCTTATGCGGTGTGAATACCGCAGAGATGCGTAAGGAGAAAAATCCGCATCAGGCGCTTTCGG
CTTCTCGCTCACTGACTCGCTGCGCTCGGTGTTGCGCTGCGCGAGCGGTATCAGCTCACTCAAAGGCGGTAAACGGTTATCCACAGAATCAGG
GGATAACGCAGGAAGAACATGCGGCGCGCCACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTCC
ATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCAGCGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCC
TGGAAGCTCCCTCGTGGCTCTCTGTTCCGACCCCTGCGCTTACCGGATACCTGTCCGCTTCTCCCTTCGGGAAGCGTGGCGTTTCTCATAGC
TCACGCTGATGGTATCTCAGTTCGGTGTAGGTGTTGCTTCAAGCTGGGTGTGTGCACGAACCCCGTTTACGCCGACCGCTGCGCTTATCCG
GTAACATCGTCTTGAGTCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGG
TGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAA
AGAGTTGGTAGCTCTTGATCCGGCAACAAACACCGCTGGTAGCGCGGTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCA
AGAAGATCCTTTGATCTTTTCTTACTGAACGGTGATCCCCACCGGAATTGCGGCCATGTTCTTTCTGCGTTATCCCTGATTCTGTGGATAACCG
TATTACCGCCTTTGAGTGAGCTGATACCGCTCGCCGAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCCAATACGC
AAACCGCTCTCCCGCGCGTTGGCGGATTATTAAATGACAGTGGCGCGCTCGCTCGCTCACTGAGGCCGCCCGGCAAGCCCGGGCGTGGGGCA
CCTTTGGTGGCCCGCCTCAGTGAGCGAGCGAGCGCGAGAGGGAGTGGCCAACTCCATCACTGAT

Fig. 32B

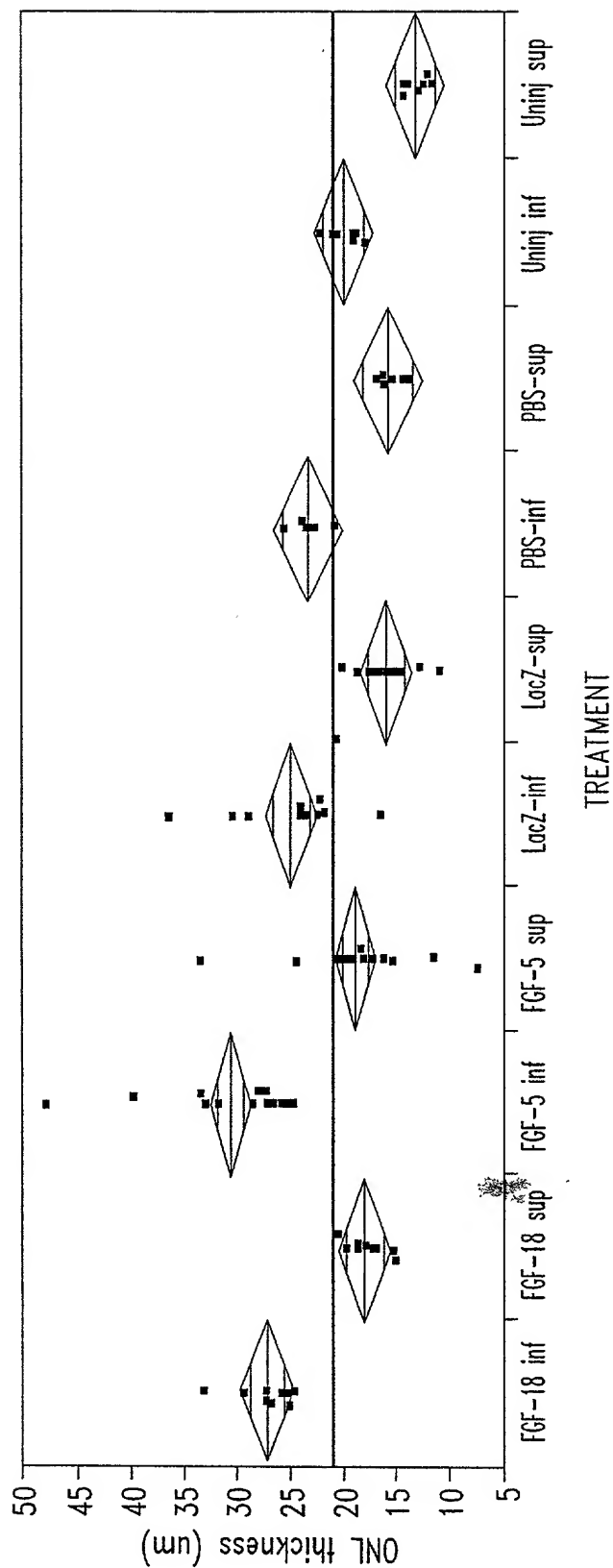
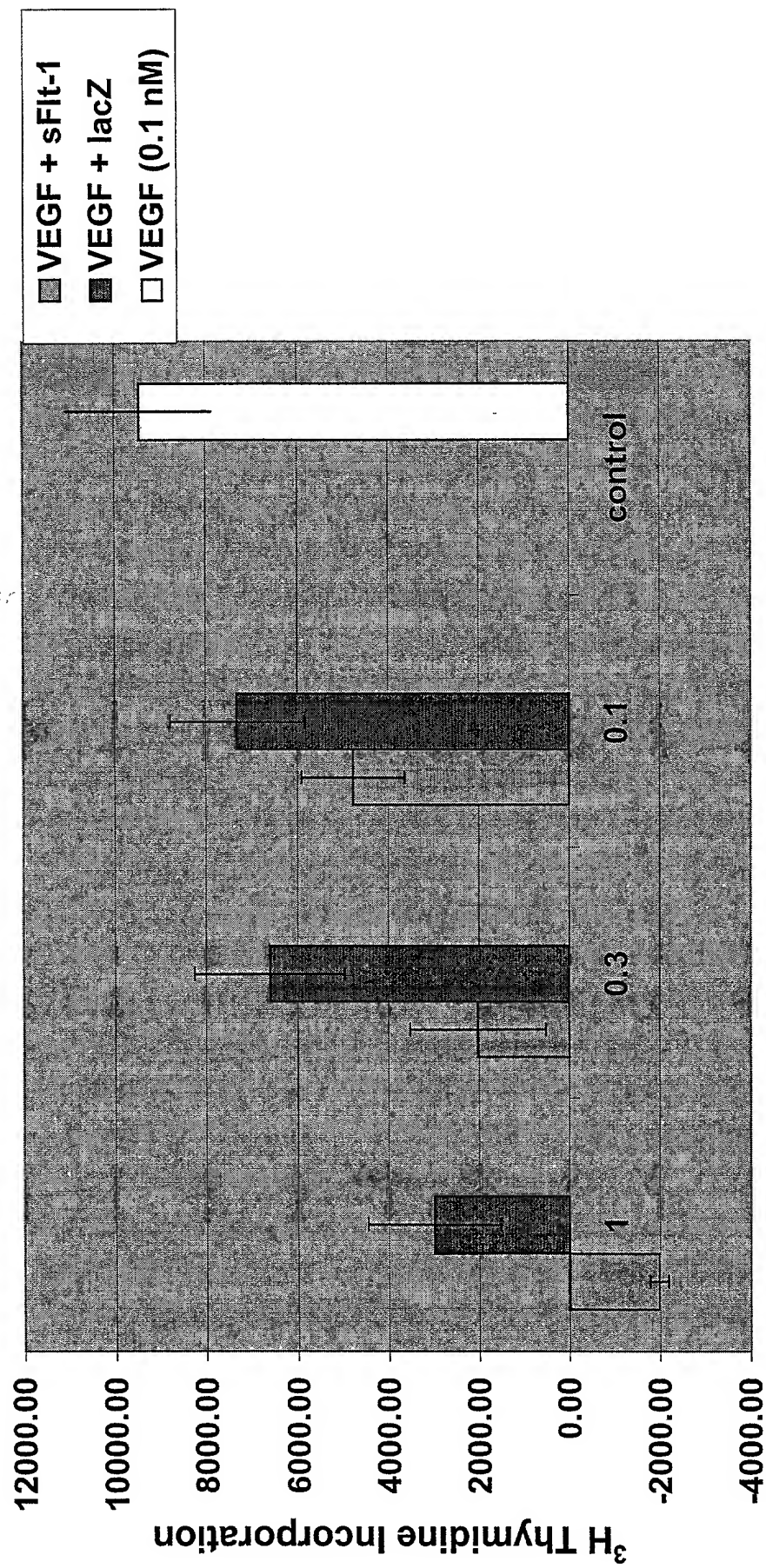


Fig. 33

Inhibition of HMVEC Proliferation by sFlt-1 rAAV



sFlt-1 Protein in Conditioned Media (in nM)

FIGURE 34

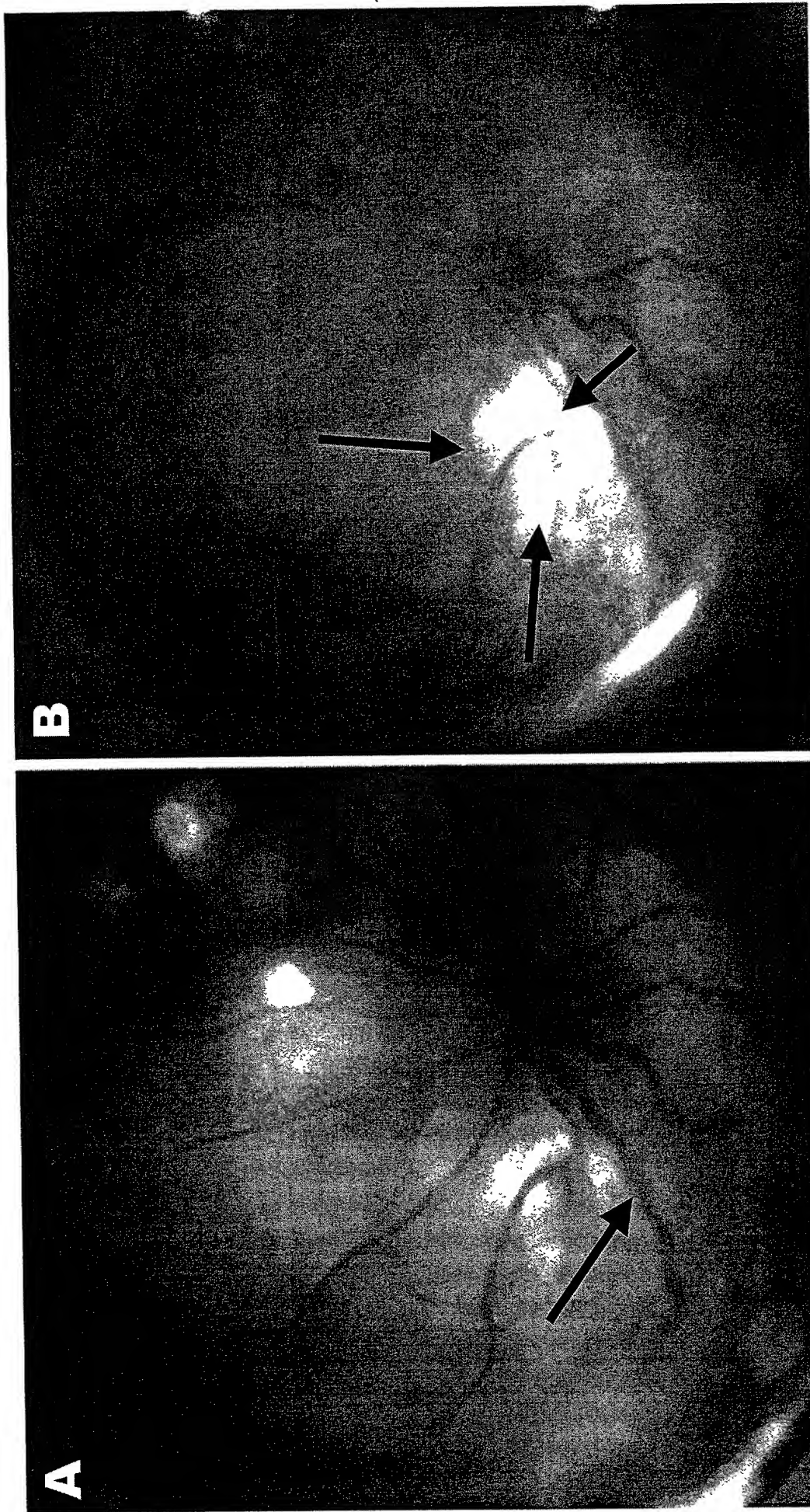


Figure 35. Fluorescein Angiography

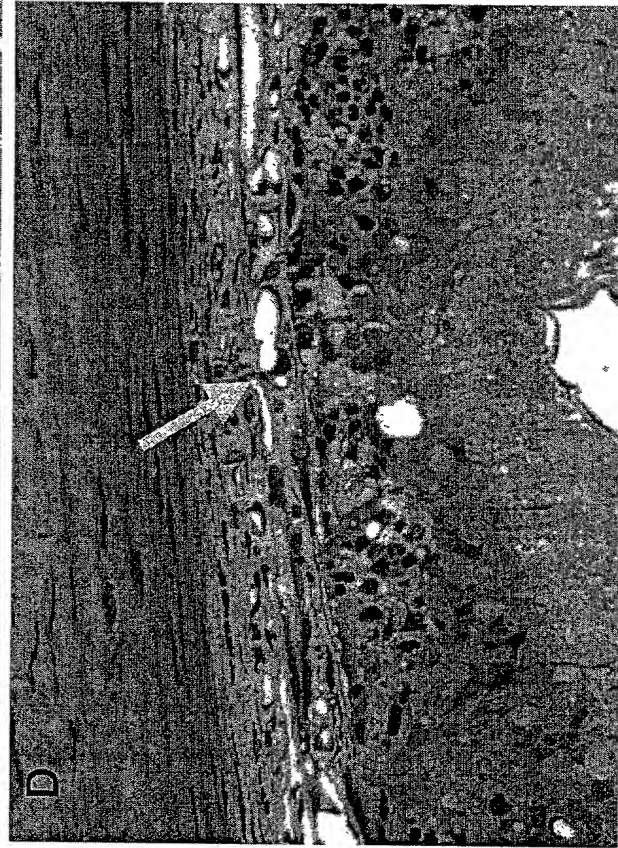
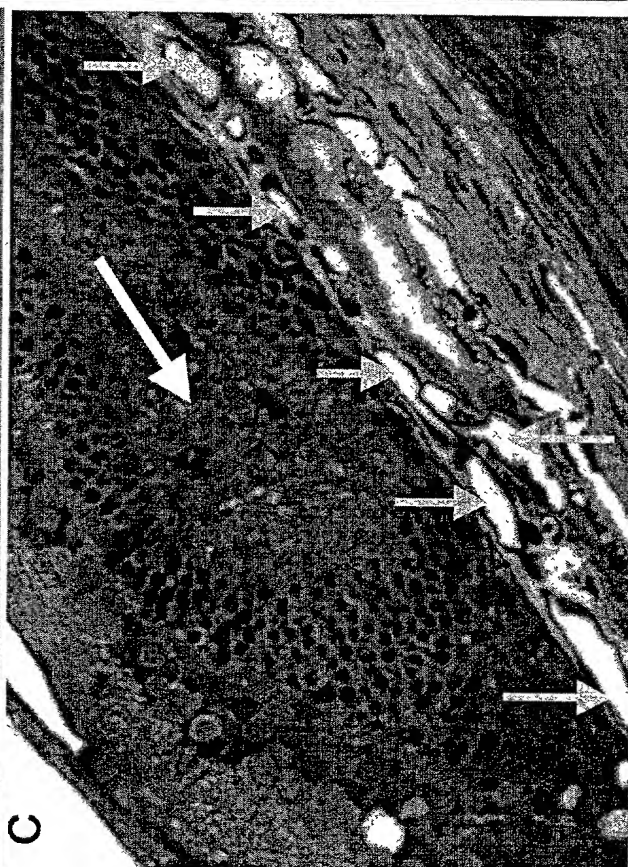
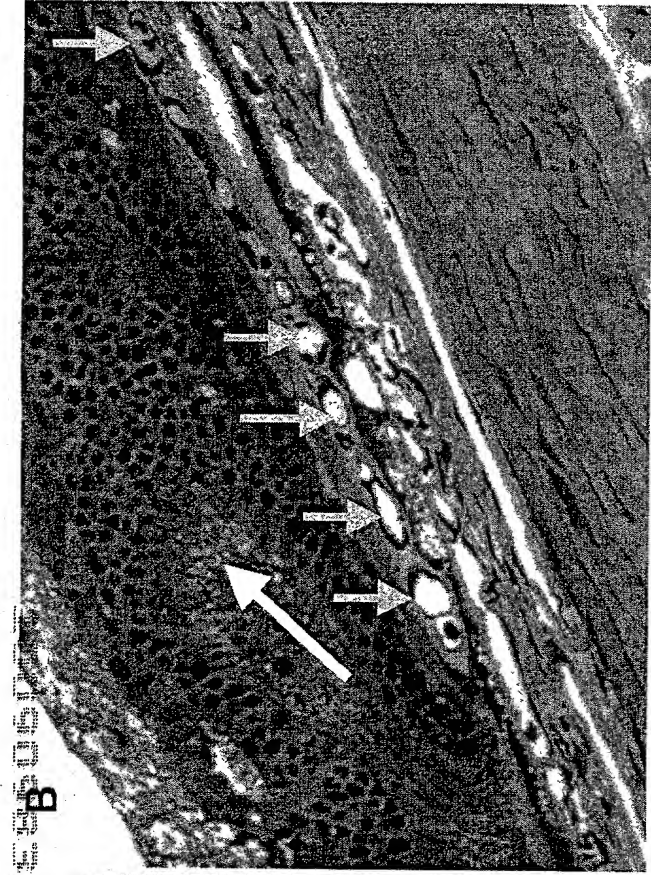
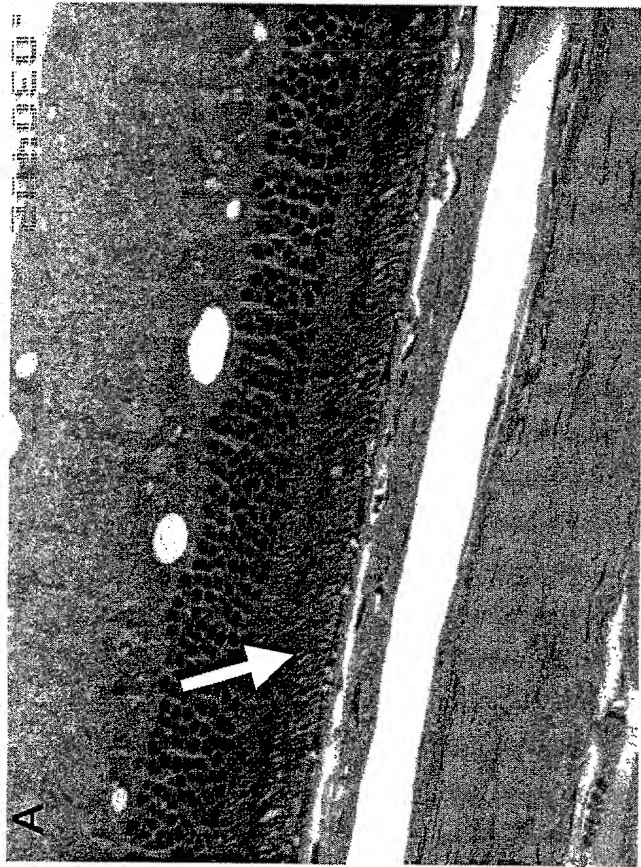


Figure 36. Epoxy Sections

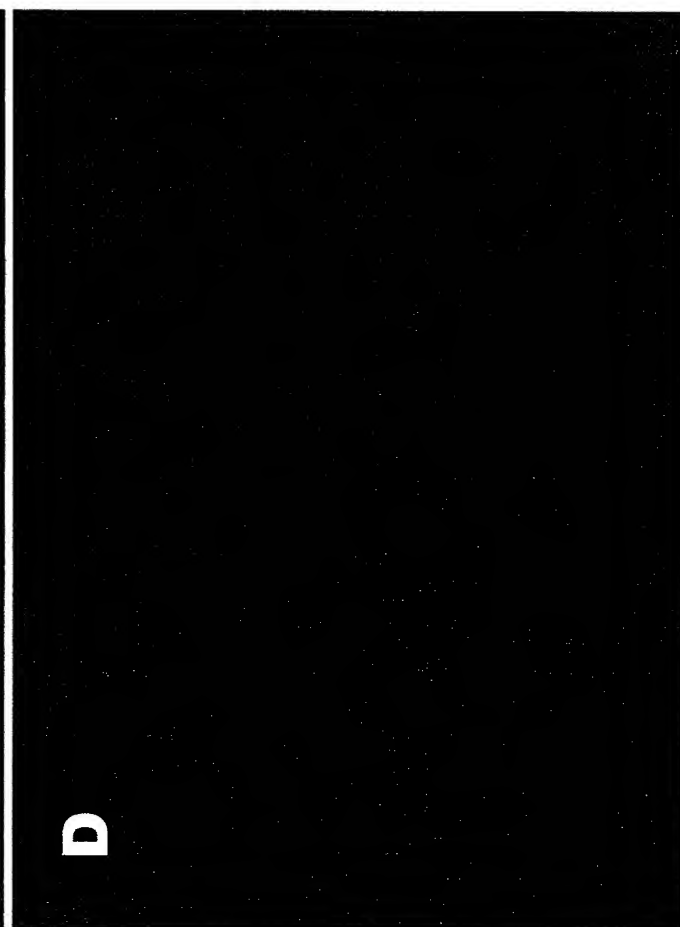
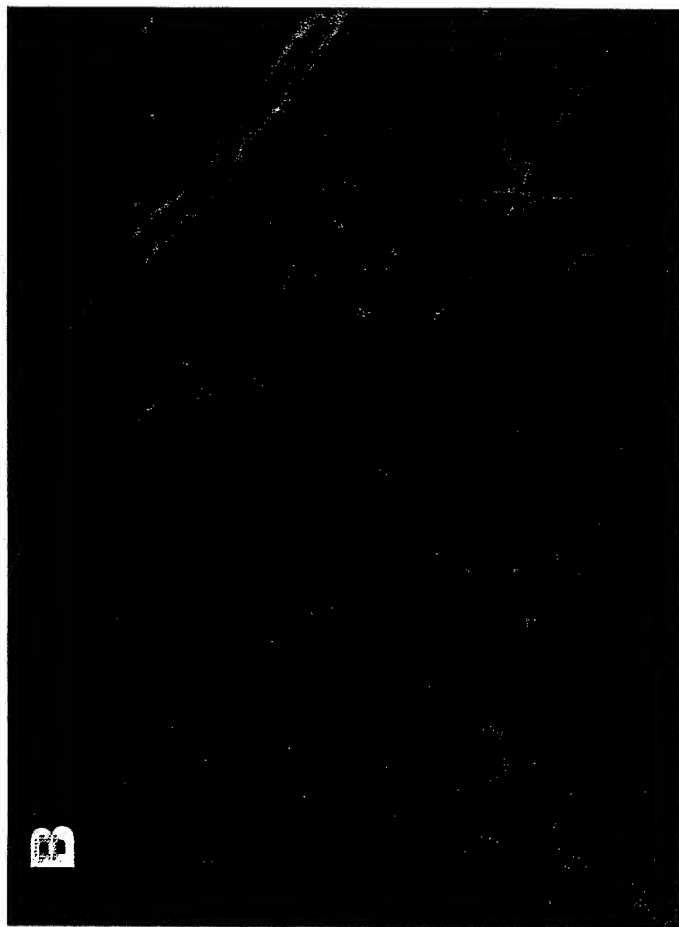


Figure 37. Lectin and BrdU staining

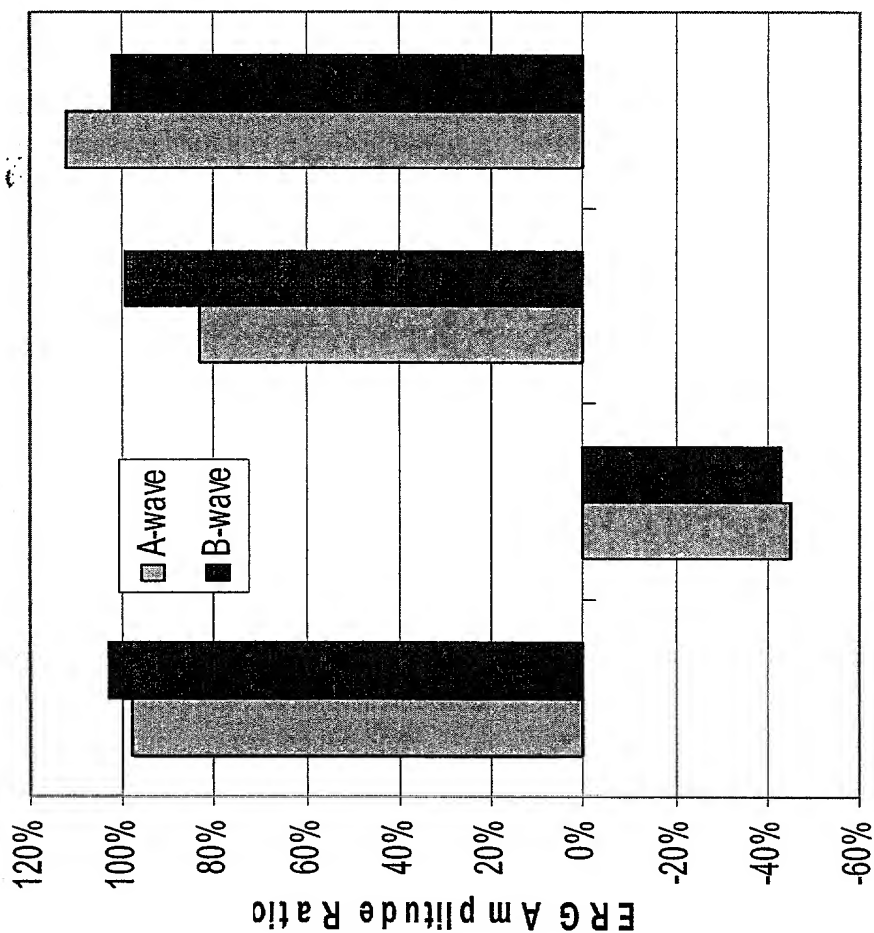


Figure 38A sFlt-1 rescue of ERGs

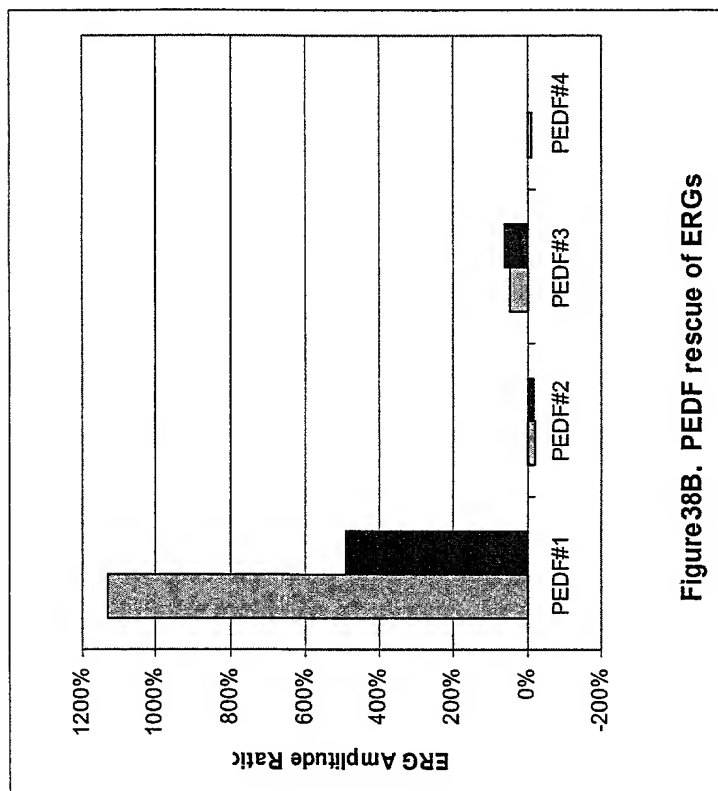


Figure 38B. PEDF rescue of ERGs

004450-6355401

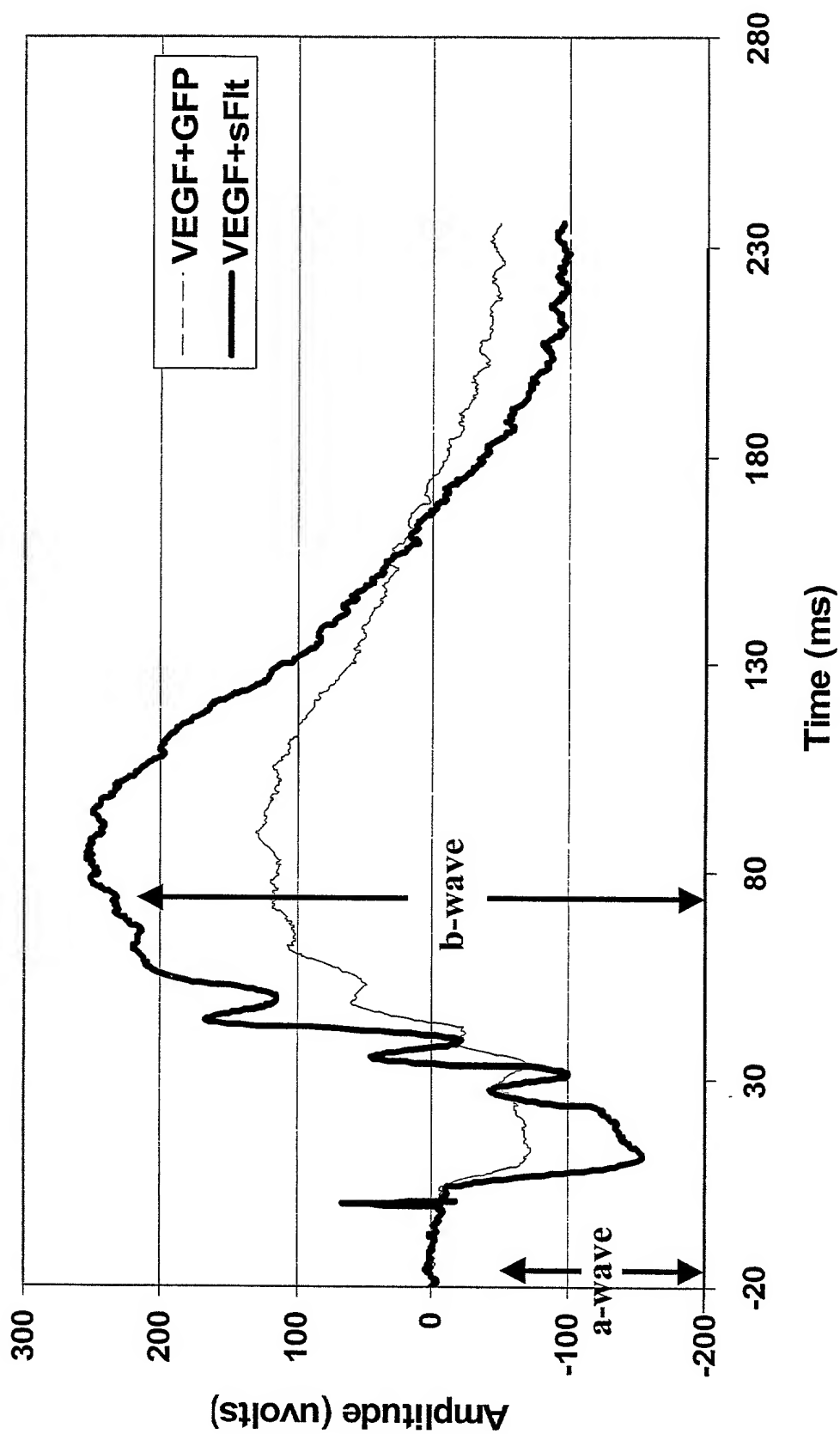


Figure 39. ERG of 070900 Rat#4 on 082300 (6 wk)